

**Before the**  
**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**  
**World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai - 400 005**  
**Tel. No. 022 22163964/65/69 – Fax 022 22163976**  
**E-mail: [mercindia@merc.gov.in](mailto:mercindia@merc.gov.in)**  
**Website: [www.mercindia.org.in](http://www.mercindia.org.in)/[www.merc.gov.in](http://www.merc.gov.in)**

**Case No. 121 of 2014**

**In the matter of**

**Petition of Maharashtra State Electricity Distribution Co. Ltd. for approval of  
Multi Year Tariff for Second Control Period FY 2013-14 to FY 2015-16**

**CORAM**

**Smt. Chandra Iyengar, Chairperson**

**Shri. Azeez M. Khan, Member**

**Shri. Deepak Lad, Member**

Maharashtra State Electricity Distribution Co. Ltd.

.....Petitioner

**ORDER**

**Dated: 26 June, 2015**

In accordance with the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations ('MYT Regulations') and the directions of the Commission, the Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) has submitted its Petition for approval of the Multi Year Tariff for the Second Control Period (FY 2013-14 to FY 2015-16).

The original Petition was filed on 7 June, 2014. It was subsequently revised on the basis of the Audited Accounts of FY 2013-14 and submitted on 4 December, 2014. Thereafter, addressing data gaps, and various concerns raised during Technical Validation Session (TVS), MSEDCL submitted its revised MYT Petition on 3 February, 2015.

In exercise of its powers under Sections 61 and 62 of the Electricity Act (EA), 2003, and in pursuance of the MYT Regulations and all other powers enabling it in this behalf, and after taking into consideration MSEDCL's submissions, the written and oral suggestions and objections received and the responses of MSEDCL, and all other relevant material, the Commission issues the following Order:

## TABLE OF CONTENTS

<b>1</b>	<b>BACKGROUND AND SALIENT FEATURES OF ORDER .....</b>	<b>17</b>
1.1	Background .....	17
1.2	Admission of the Petition, and Regulatory Process .....	18
1.3	Organisation of the Order .....	21
<b>2</b>	<b>SUGGESTIONS/OBJECTIONS, MSEDCL'S RESPONSE AND COMMISSION'S RULING .....</b>	<b>23</b>
2.1	Delay in filing of MYT Petition, and its retrospective application .....	23
2.2	Technical Validation Session .....	25
2.3	Power Purchase .....	25
2.4	Capital Expenditure .....	30
2.5	Operation and Maintenance Expenses .....	31
2.6	Sales and Energy Balance .....	32
2.7	Interest on Working Capital and Consumer Security Deposit .....	33
2.8	Recovery of arrears .....	34
2.9	Provision for Bad debts .....	36
2.10	Metering, Billing, Energy Audit and System Losses .....	37
2.11	Distribution Loss .....	43
2.12	Revenue Gap .....	46
2.13	Increase in Tariff .....	48
2.14	Average Cost of Supply and Cross-Subsidy Surcharge .....	53
2.15	Open Access and Wheeling Charges.....	56
2.16	Tariff for different Consumer Categories.....	58
2.17	Categorisation of Cold Storage .....	68
2.18	Merger of Continuous and Non Continuous Categories .....	70
2.19	Separate tariff for EHV consumers .....	71
2.20	Separate Tariff for 1 MW Consumers .....	73
2.21	Hike in Fixed Charges .....	74
2.22	Rebates and Incentives .....	77
2.23	Fuel Adjustment Cost.....	82

2.24	Load Shedding.....	82
2.25	Supply to Other Licensees.....	84
2.26	Quality of Power Supply .....	86
2.27	Passing on NCE cost to Polluting Industries.....	88
2.28	Applicability of Local Body Tax (LBT) .....	89
2.29	Addressing infrastructure requirements for Malegaon.....	91
2.30	Fatal System Incidences & Planning for Safety System Upgradation .....	92
2.31	Voltage wise Cost of Supply and Energy Balance.....	93
2.32	Revenue on account of change in tariff.....	94
<b>3</b>	<b>DETERMINATION OF AGGREGATE REVENUE REQUIREMENT FOR FY 2013-14 TO FY 2015-16.....</b>	<b>96</b>
3.1	MYT Control Period .....	96
3.2	Sales in FY 2013-14 to FY 2015-16 .....	96
3.3	Distribution Loss in FY 2013-14 to FY 2015-16.....	110
3.4	Energy Balance for FY 2013-14 to FY 2015-16.....	112
3.5	Power purchase from FY 2013-14 to FY 2015-2016.....	118
3.6	Power Purchase Expenses in FY 2013-14.....	118
3.7	Power Purchase Expenses for FY 2014-15 .....	124
3.8	Power Purchase Expenses for FY 2015-16 .....	128
3.9	Transmission Charges and MSLDC Charges for FY 2013-14 to FY 2015-16.....	141
3.10	O&M Expenses for FY 2013-14 to FY 2015-16.....	142
3.11	Capital Expenditure and Capitalisation for FY 2013-14 to FY 2015-16 .....	146
3.12	Depreciation .....	153
3.13	Interest Expenses.....	156
3.14	Interest on Working Capital .....	158
3.15	Other Finance Charges .....	162
3.16	Return on Equity .....	164
3.17	Provision for Bad Debts .....	167
3.18	Other Expenses.....	169
3.19	Income Tax.....	170
3.20	Contribution to Contingency Reserve .....	172

3.21	Incentives and Discounts .....	173
3.22	Prior Period Expenses .....	173
3.23	DSM Expenses .....	176
3.24	Regulatory Liability Charge Refund .....	176
3.25	Non-Tariff Income .....	178
3.26	Income from Wheeling Charges.....	179
3.27	Income from Open Access Charges .....	179
3.28	Revenue from Trading of Surplus Power.....	180
3.29	Revenue on account of change of Category .....	181
3.30	Revenue from Sale of Power .....	183
3.31	Effect of sharing of Gains and Losses for FY 2013-14.....	184
3.32	Wires and Supply Availability Incentive for FY 2013-14 .....	186
3.33	Segregation of Wires and Supply ARR.....	187
3.34	Determination of ARR for FY 2013-14 .....	188
3.35	Determination of ARR for FY 2014-15 to FY 2015-16.....	190
<b>4</b>	<b>IMPACT OF PAST ORDERS ON REVENUE GAP .....</b>	<b>194</b>
4.1	Balance Revenue Gap of Final True up of FY 2011-12 and FY 2012-13 .....	194
4.2	Refund of difference of Tariff (Case No. 105 of 2013) .....	194
4.3	Disallowed Capex-related expenses for FY 2007-08.....	196
4.4	Income Tax for FY 2011-12 and FY 2012-13 .....	197
4.5	Impact of MSPGCL recoveries .....	198
4.6	Impact of Carrying cost .....	199
4.7	Total Revenue Gap .....	201
<b>5</b>	<b>COMPLIANCE OF EARLIER DIRECTIVES .....</b>	<b>203</b>
5.1	Consumers with Contract Demand of 1 MW and above.....	203
5.2	DTC and Feeder Metering .....	203
5.3	Performance parameters .....	205
5.4	Power purchase from Madhya Pradesh .....	205
5.5	Metering of un-metered Agriculture Consumers .....	206
5.6	Third-party Energy Audit.....	208

5.7	Outstanding arrears from Distribution Franchisees.....	209
5.8	Reconciliation statement of ZLS account .....	210
5.9	Pilot project for reorganization of staffing pattern in Amravati.....	210
5.10	Refund of pending amounts to PD consumers .....	211
5.11	Progress of implementation of Infrastructure Plan at Malegaon.....	211
5.12	High acquittal rate in theft cases .....	212
5.13	Bad Debts .....	213
5.14	Schedule of Charges .....	213
5.15	Power Procurement Plan .....	213
5.16	Retired Assets.....	214
5.17	Recovery from theft of power .....	215
5.18	Cash flow statements.....	215
5.19	Theft of electricity .....	216
5.20	Risk Mitigation Plan.....	216
5.21	Continuous/ Non Continuous tariff categories .....	218
5.22	Income Tax Challan submission .....	218
5.23	Contingency Reserves .....	219
5.24	Action Plan for reduction of Distribution Loss .....	219
<b>6</b>	<b>TARIFF PHILOSOPHY, TARIFF DESIGN AND CATEGORY-WISE TARIFFS FOR FY 2015-16 .....</b>	<b>220</b>
6.1	Overall Approach for Tariff Design .....	220
6.2	Applicability of revised Tariffs .....	224
6.3	Consolidated Revenue Gap .....	225
6.4	Tariff Philosophy proposed by MSEDCL and Commission's Rulings .....	225
6.5	Full Cost Recovery .....	225
6.6	Economical Use of Electricity .....	226
6.7	Rationalization of Fixed Cost.....	226
6.8	Determination of Wheeling Charges and Cross-Subsidy Surcharge.....	229
6.9	Need for determination of Additional Surcharge .....	229
6.10	Merger of Continuous and non-Continuous Category .....	231
6.11	Introduction of new Tariff slabs for Residential Category.....	232

6.12	Tariff for Agriculture Consumers, LT Industrial above 20 kW and Street Lights	233
6.13	Rationalisation of ToD rebate for night off-peak consumption .....	234
6.14	Rationalisation of Power Factor Incentives.....	237
6.15	Passing on NCE Cost to Polluting Industries .....	237
6.16	Inter-State Tariff.....	238
6.17	Creation of HT Bulk Supply (Residential) Category .....	240
6.18	Separate Category for Government Schools and Hospitals .....	241
6.19	Stand-by Charges for Captive Power Plants .....	241
6.20	Billing Demand during Off-Peak Period.....	242
6.21	Increase in Load level for release of connections as per SoP Regulations, 2014 .	243
6.22	ToD Rebate to Captive Solar Generators .....	244
6.23	Proposal for Schedule of Charges .....	245
6.24	Tariff for Mobile Towers .....	246
6.25	Tariff for Charging of Hybrid Vehicles .....	247
6.26	Load Factor Incentives .....	247
6.27	Supply to Other Licensees.....	249
6.28	Tariff for small businesses operated from residences .....	249
6.29	Retrospective CSS for FY 2014-15.....	250
6.30	Separate Category for 1 MW and above consumers .....	252
6.31	Categorisation of Cold Storage .....	252
6.32	Categorisation of Bio-Technology Industries .....	253
6.33	Separate Category for Powerlooms.....	254
6.34	Separate Category for Metro .....	254
6.35	Category for Testing and R&D Labs .....	255
6.36	Water Supply to Industrial premises .....	257
6.37	Re-categorisation of Industrial consumer category.....	257
6.38	Re-categorisation of Aquaculture, Sericulture, Fisheries and Cattle Breeding Farms	258
6.39	Key Considerations for Tariff Design .....	259
6.40	Stand-by Charges from Mumbai Distribution Licensees .....	261
6.41	Other key components of Tariff .....	262
6.42	Average Cost of Supply, Proposed Tariffs and Approved Tariffs .....	263

6.43	Revised Tariff with effect from 1 June 2015 .....	266
6.44	Pass through of variation in cost of power purchase .....	271
6.45	Vetting of Fuel Adjustment Cost levied on consumers.....	272
6.46	Wheeling Charges .....	272
6.47	Voltage-wise Cost of Supply .....	276
6.48	Cross-Subsidy Surcharge .....	279
6.49	Incentives and Disincentives .....	293
6.50	Prompt Payment Discount.....	294
6.51	Delayed Payment Charges.....	294
6.52	Rate of Interest on Arrears .....	294
6.53	Load Factor Incentive.....	294
6.54	EHV Supply Rebate .....	295
6.55	APPLICABILITY OF ORDER.....	295
<b>7</b>	<b>SUMMARY OF RULINGS AND DIRECTIVES .....</b>	<b>297</b>
7.1	Energy Sales .....	297
7.2	Distribution Losses.....	297
7.3	Energy Balance.....	298
7.4	Power Purchase .....	298
7.5	Transmission Charges and MSLDC Charges.....	299
7.6	Operation and Maintenance (O&M) Expenses .....	299
7.7	Interest on Working Capital and Security Deposit.....	300
7.8	Capitalisation.....	300
7.9	Depreciation .....	301
7.10	Interest on Debt .....	301
7.11	Other Finance Charges .....	301
7.12	Return on Equity .....	301
7.13	Provision for Bad Debts .....	302
7.14	Contribution towards Contingency Reserve.....	302
7.15	Others – Income Tax, Other Expenses, Incentives and Discounts, Prior Period Expenses, DSM Expenses, RLC Refunds .....	302

7.16	Non-Tariff Income, Income from Wheeling Charges, Income from Open Access Charges, Income from Trading Surplus, Deemed Revenue on account of change of category .....	304
7.17	Aggregate Revenue Requirement (ARR), Wires, Supply and Combined .....	305
7.18	Revenue from Sale of Power .....	305
7.19	Additional Claims.....	305
7.20	Revenue Gap / (Surplus) .....	306
7.21	Average Cost of Supply .....	307
7.22	Total Revenue Requirement for FY 2015-16.....	307
7.23	Wheeling Charges, Wheeling Losses and CSS for Open Access Consumers .....	307
7.24	Tariff Philosophy, Tariff Design, Recategorisation and related issues .....	308
7.25	Agriculture Subsidy.....	313
7.26	Applicability of the Order .....	313



## List of Tables

Table 1: Schedule of Public Hearings.....	20
Table 2: Trend of actual Distribution Loss .....	45
Table 3: Distribution Infrastructure in Maharashtra .....	45
Table 4: Revenue Gap, as submitted by MSEDCL (Rs. Crore).....	47
Table 5: Major Expenses of MSEDCL.....	51
Table 6: Night Consumption .....	79
Table 7: Category-wise Energy Sales for FY 2013-14.....	98
Table 8: Category-wise Energy Sales for Projection for FY 2014-15 .....	99
Table 9: Category-wise Sales for FY 2014-15 as per additional submission by MSEDCL .....	101
Table 10: Comparison of FY 2014-15 Sales Projection by MSEDCL .....	103
Table 11: Comparison of FY 2014-15 Sales (MU) .....	104
Table 12: Growth rate considered by MSEDCL for FY 2015-16.....	105
Table 13: Approved Sales Projections for FY 2015-16 (in MU).....	109
Table 14: Approved Distribution Losses for FY 2013-14 .....	111
Table 15: Approved Distribution Losses for FY 2014-15 and FY 2015-16.....	111
Table 16: Energy Balance for FY 2013-14 to FY 2015-16 as submitted by MSEDCL .....	113
Table 17: Energy Balance for FY 2013-14 as approved by Commission.....	114
Table 18: Details of actual surplus power traded in FY 2014-15, as submitted by MSEDCL .....	115
Table 19: Energy Balance for FY 2014-15 as approved by Commission.....	116
Table 20: Energy Balance for FY 2015-16 as approved by Commission.....	117
Table 21: Source-wise break-up of power purchase cost for FY 2013-14.....	122
Table 22: Break-up of Supplementary Bills by MSPGCL for FY 2013-14 (Rs Crore).....	123
Table 23: Reconciliation of expenses on power purchase from MSPGCL.....	123
Table 24: Power purchase expenses for FY 2013-14 (Rs. Crore).....	124
Table 25: Power purchase expenses as submitted by MSEDCL for FY 2014-15 (Rs. Crore).....	127
Table 26: Excess power purchase disallowed for FY 2014-15 (Rs. Crore).....	128
Table 27: Power purchase expense approved for FY 2014-15 (Rs. Crore) .....	128
Table 28: Power purchase expenses submitted by MSEDCL for FY 2015-16 (Rs. Crore).....	130
Table 29: Power purchase quantum and cost of MSPGCL Stations, as projected by MSEDCL for FY 2015-16 .....	131
Table 30: Approved Cost and Quantum of MSPGCL Stations as per Case No. 15 of 2015 .....	132
Table 31: Capacity Share of IPPs for MSEDCL (MW).....	135
Table 32: Power purchase from Stations/Units (excluded from MOD) in FY 2015-16 .....	137
Table 33: Power purchase approved by Commission based on MoD for FY 2015-16.....	137
Table 34: Power purchase quantum and cost approved by Commission for FY 2015-16.....	139
Table 35: Transmission Charges and MSLDC Charges approved by Commission for FY 2013-14 to FY 2015-16 (Rs. Crore) .....	142
Table 36: O&M Expenses for FY 2013-14 as submitted by MSEDCL (Rs. Crore).....	142
Table 37: O&M Expenses on normative basis as submitted by MSEDCL (Supply).....	143
Table 38: O&M Expenses on normative basis as submitted by MSEDCL (Wires) .....	143
Table 39: O&M Expenses on normative basis as per MSEDCL (Wires+Supply) (Rs Crore).....	144
Table 40: O&M Expenses approved by Commission (Supply).....	145
Table 41: O&M Expenses approved by Commission (Wires) .....	145

Table 42: O&M Expenses approved by Commission (Wires+Supply) (Rs. Crore) .....	146
Table 43: Capex and Capitalisation as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)....	146
Table 44: DPR scheme Capex and Capitalisation submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore).....	146
Table 45: Non-DPR scheme Capex and Capitalisations submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore) .....	147
Table 46: Division-wise Loss Reduction target Vs achievement, as submitted by MSEDCL .....	149
Table 47: Excess Capitalisation claimed by MSEDCL in FY 2013-14 (Rs Crore) .....	150
Table 48: Capitalisation disallowed for Deogad Wind Power Project (Rs. Crore).....	151
Table 49: Schemes of revenue nature for which Capitalisation is disallowed, and added in ARR as revenue expense (Rs. Crore) .....	152
Table 50: Excess Capitalisation claimed by MSEDCL in FY 2014-15 and FY 2015-16 (Rs Crore) .....	152
Table 51: Capitalisation approved by Commission for FY 2013-14 to FY 2015-16 (Rs Crore) .....	153
Table 52: Depreciation as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore) .....	154
Table 53: Depreciation approved by the Commission for FY 2013-14 to FY 2015-16 (Rs. Crore).....	155
Table 54: Interest on Long-term Loans as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore) .....	156
Table 55: Funding of Capitalisation submitted by MSEDCL for FY 2013-14 (Rs. Crore).....	157
Table 56: Funding of Capitalisation approved by Commission for FY 2013-14 (Rs. Crore).....	157
Table 57: Funding of capitalisation approved by Commission for FY 2014-15 and FY 2015-16 (Rs. Crore)...	157
Table 58: Approved Interest Expense for FY 2013-14 and FY 2015-16 (Rs. Crore).....	158
Table 59: Interest on Working Capital and Security Deposit for Wires Business, as submitted by MSEDCL (Rs. Crore).....	159
Table 60: Interest on Working Capital and Security Deposit for Supply as submitted by MSEDCL (Rs. Crore) .....	160
Table 61: Interest on Working Capital and Security Deposit for Wires, approved by Commission (Rs. Crore)	161
Table 62: Interest on Working Capital and Security Deposit for Supply approved by Commission (Rs. Crore) .....	162
Table 63: Break-up of DPC in FY 2014-15 submitted by MSEDCL .....	163
Table 64: Other Finance Charges for FY 2013-14 to FY 2015-16 .....	164
Table 65: Return on Equity (Wires) claimed by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore).....	165
Table 66: Return on Equity (Supply) claimed by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore) .....	165
Table 67: Return on Equity (Wires) for FY 2013-14 to FY 2015-16 approved by Commission (Rs. Crore) ....	166
Table 68: Return on Equity (Supply) for FY 2013-14 to FY 2015-16 approved by Commission (Rs. Crore)...	167
Table 69: Provision for Bad Debts for Supply Business as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore) .....	167
Table 70: Provision for Bad Debts for Wires Business as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore) .....	167
Table 71: Receivables as per Audited Accounts for FY 2013-14.....	168
Table 72: Provision for Bad Debts for Wires and Supply Business for FY 2013-14 to FY 2015-16, approved by Commission (Rs. Crore) .....	168
Table 73: Other Expenses for Wires and Supply Business for FY 2013-14 to FY 2015-16 submitted by MSEDCL.....	169
Table 74: Other Expenses for FY 2013-14 to FY 2015-16 approved by Commission (Rs. Crore) .....	170
Table 75: Income Tax claimed by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore) .....	170
Table 76: Income Tax claimed by MSEDCL during FY 2013-14.....	171

Table 77: Income Tax for FY 2013-14 to FY 2015-16.....	172
Table 78: Contribution to Contingency Reserve approved by Commission (Rs. Crore).....	173
Table 79: Incentive and Discounts approved by Commission (Rs. Crore).....	173
Table 80: Break-up of Prior Period Expenses for FY 2013-14 as submitted by MSEDCL (Rs. Crore).....	174
Table 81: Prior Period Expenses for FY 2013-14 (Rs. Crore).....	175
Table 82: Expenditure on DSM Schemes allowed as part of ARR (Rs. Crore) .....	176
Table 83: Details of RLC Refund.....	177
Table 84: RLC refund for FY 2013-14 to FY 2015-16 (Rs Crore).....	178
Table 85: Non-Tariff Income for FY 2013-14 to FY 2015-16 (Rs Crore) .....	179
Table 86 : Income from Wheeling Charges for FY 2013-14 to FY 2015-16 (Rs Crore).....	179
Table 87 : Income from Open Access charges for FY 2013-14 to FY 2015-16 (Rs Crore) .....	179
Table 88: Income from trading of surplus power as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs Crore).....	180
Table 89: Income from trading of surplus power as submitted by MSEDCL for FY 2013-14 to FY 2015-16..	180
Table 90 : Income from surplus power traded during FY 2013-14 to FY 2015-16 approved by Commission (Rs. Crore).....	181
Table 91: Revenue from sale of power for FY 2013-14, FY 2014-15 and FY 2015-16 (Rs. Crore).....	184
Table 92: Sharing of Gains & Losses for O&M Expenses (Supply) For FY 2013-14 (Rs Crore).....	185
Table 93 : Sharing of Gains & Losses for O&M Expenses (Wires) for FY 2013-14 (Rs Crore) .....	185
Table 94 : Sharing of Gains & Losses for O&M Expenses (Supply+Wires) for FY 2013-14 (Rs Crore).....	185
Table 95 : Sharing of Gains & Losses for FY 2013-14 (Supply) .....	186
Table 96 : Total Impact of Sharing of Gains & Losses of O&M Expense and IoWC for FY 2013-14 (Rs Crore) .....	186
Table 97 : Wires Availability of MSEDCL in FY 2013-14.....	186
Table 98 : Supply Availability of MSEDCL in FY 2013-14.....	186
Table 99 : Ratio of allocation of expenses to Wires and Supply Businesses .....	187
Table 100 : Aggregate Revenue Requirement for FY 2013-14 (Wires) (Rs. Crore) .....	188
Table 101 : Aggregate Revenue Requirement for FY 2013-14 (Supply) (Rs. Crore) .....	188
Table 102 : Aggregate Revenue Requirement for FY 2013-14 (Combined Wires+Supply) (Rs. Crore) .....	189
Table 103 : Aggregate Revenue Requirement for FY 2014-15 and FY 2015-16 (Wires) (Rs. Crore) .....	190
Table 104 : Aggregate Revenue Requirement for FY 2014-15 and FY 2015-16 (Supply) (Rs. Crore) .....	191
Table 105 : Aggregate Revenue Requirement for FY 2014-15 and FY 2015-16 (Wires+Supply) (Rs. Crore)..	192
Table 106: Difference in Capex-related Expenses approved by Commission for FY 2007-08.....	196
Table 107: Income Tax for FY 2011-12 and FY 2012-13 .....	198
Table 108: Impact of Case No. 201 of 2014 and Case No. 15 of 2015 .....	199
Table 109: Carrying cost on account of various expense heads (as per MSEDCL) .....	199
Table 110: Carrying cost on account of refund as per Order in Case No. 105 of 2013 (as per MSEDCL).....	199
Table 111: Carrying Cost on account of balance Gap in truing up .....	200
Table 112: Net Carrying cost/Holding Cost .....	201
Table 113: Total Revenue Gap / (Surplus) (Rs Crore) .....	201
Table 114: MSEDCL's Agriculture Metering Plan .....	207
Table 115: Distribution Franchisee Arrears.....	209
Table 116: Recovery from Theft of Power .....	215
Table 117: Category-wise Fixed/ Demand Charges – Existing and Proposed .....	226
Table 118: Residential Slabs – Existing and Proposed.....	233
Table 119: ToD Time Slots and Discount/Penalty, as proposed by MSEDCL .....	235

Table 120: Stand-by Charges for FY 2015-16.....	261
Table 121: ToD Time Slots and Tariffs approved by Commission .....	262
Table 122: Average Cost of Supply for FY 2015-16.....	263
Table 123: LT Category: Average Billing Rate – Existing and Approved Tariff.....	263
Table 124: HT Category: Average Billing Rate – Existing and Approved Tariff .....	264
Table 125: Cross-Subsidy at Existing and Approved Tariffs .....	265
Table 126: Summary of LT Tariffs effective from 1 June, 2015.....	266
Table 127: Summary of HT Tariffs effective from 1 June, 2015 .....	269
Table 128: Approved Wheeling Charges and Losses in Case No. 19 of 2012 .....	272
Table 129: Voltage-wise ratio and estimated Sales as submitted by MSEDCL .....	273
Table 130: Proposed Wheeling Charges for FY 2014-15 and 2015-16.....	273
Table 131: GFA and Sales considered by the Commission .....	274
Table 132: Determination of Network Cost for FY 2015-16 (Rs Crore).....	274
Table 133: Voltage-wise Share of Network Cost for FY 2015-16 .....	275
Table 134: Wheeling Charges approved for FY 2015-16.....	275
Table 135: Proposed and Approved Wheeling Charges & Wheeling Losses for 2015-16.....	276
Table 136: MSEDCL working of Voltage-wise Cost of Supply for FY 2015-16 .....	278
Table 137: Commission’s computation of Voltage-wise Cost of Supply for FY 2015-16.....	278
Table 138: Merit Order Stack for FY 2015-16 .....	280
Table 139: Top 5% for computation of ‘C’ .....	282
Table 140: Computation of System Losses approved by the Commission .....	282
Table 141: Wheeling Charges approved by the Commission .....	282
Table 142: Cross-Subsidy Surcharge computation as per MERC (Distribution Open Access) Regulations, 2014 .....	283
Table 143: Cross-Subsidy Surcharge as approved by the Commission for FY 2015-16.....	290
Table 144: Power Factor Incentive approved for FY 2015-16 .....	293
Table 145: Power Factor Penalty approved for FY 2015-16.....	293
Table 146: Rate of Interest on Arrears approved for FY 2015-16.....	294
<b>Table 147: Total Revenue Gap / (Surplus) (Rs Crore) .....</b>	<b>306</b>

### List of Abbreviations

Abbreviation	Expansion
A&G	Administration and General
ABR	Average Billing Rate
ACoS	Average Cost of Supply
AEC	Additional Energy Charge
AFC	Annual Fixed Cost
AG	Agriculture
APDRP	Accelerated Power Development and Reforms Programme
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
AS	Accounting Standard
ASC	Additional Supply Charge
AT&C	Aggregate Technical and Commercial
ATE/APTEL	Appellate Tribunal for Electricity
AUX	Auxiliary
BEST	Brihan-Mumbai Electric Supply & Transport Undertaking
BPL	Below Poverty Line
CAGR	Compounded Annual Growth Rate
Capex	Capital Expenditures
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
CIL	Coal India Ltd.
COD	Commercial Operation Date
Commission/MERC	Maharashtra Electricity Regulatory Commission
COS	Cost of Supply
COSIA	Chamber of Small Industries Association
CPI	Consumer Price Index
CPP	Captive Power Plant
CPPA	Captive Power Producers Association
CSS	Cross-subsidy Surcharge
CT	Current Transformer
DA	Dearness Allowance
DCL	Distribution Commercial Loss
DF	Distribution Franchisee
DIC	Directorate of Industries and Commerce
DPC	Delay Payment Charges
DPR	Detailed Project Report
DSM	Demand Side Management

Abbreviation	Expansion
DTA	Deferred Tax Asset
DTC	Distribution Transformer Center
DTL	Deferred Tax Liability
EA2003/Act	Electricity Act, 2003
EDP	Embedded Display Port
EHV	Extra High Voltage
ESO	Energy Sent Out
FAC	Fuel Adjustment Cost
FBSM	Final Balance Settlement Mechanism
FY	Financial Year
GC	Generation Charge
GFA	Gross Fixed Assets
GOI	Government of India
GoM	Government of Maharashtra
GSA	Gas Supply Agreement
HP	Horse Power
HT	High Tension
HVDS	High Voltage Distribution System
IBSM	Interim Balancing Settlement Mechanism
IC	Interim Charge
IDC	Interest During Construction
InSTS	Intra-State Transmission System
IPP	Independent Power Producer
IT/ITES	Information Technology/ Information Technology Enabled Services
kVA	Kilo-Volt Ampere
kW	Kilo Watt
kWh	Kilo Watt Hour / Unit
LT	Low Tension
MGP	Mumbai Grahak Panchayat
MoD	Merit Order Despatch
MOP	Ministry of Power
MPECS	Mula Pravara Electric Cooperative Society Limited
MPESB	Madhya Pradesh State Electricity Board
MSEB	Maharashtra State Electricity Board
MSEDCL	Maharashtra State Electricity Distribution Co. Ltd.
MSETCL	Maharashtra State Electricity Transmission Co. Ltd.
MSLDC	Maharashtra State Load Despatch Centre
MSPGCL	Maharashtra State Power Generation Co. Ltd.
MU	Million Units
MW	Mega Watt

Abbreviation	Expansion
MYT	Multi Year Tariff
NCE	Non Conventional Energy
NLDC	National Load Despatch Centre
NPCIL	Nuclear Power Corporation of India Limited
NTPC	National Thermal Power Corporation Limited
O&M	Operation and Maintenance
OA	Open Access
Opex	Operational Expenditure
PD	Permanent Disconnected
PF	Power Factor
PFC	Power Finance Corporation
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PPA	Power Purchase Agreement
PWW	Public Water Works
PXIL	Power Exchange India Limited
RBI	Reserve Bank of India
RE	Renewable Energy
REC	Renewable Energy Certificates
REC	Rural Electrification Corporation
RGGVY	Rajeev Gandhi Grameen Vidyutikaran Yojana
RGPL	Ratnagiri Gas and Power Pvt. Ltd.
RInfra	Reliance Infrastructure Limited
RLC	Regulatory Liability Charge
RLDC	Regional Load Despatch Centre
RoE	Return on Equity
RPO	Renewable Purchase Obligation
RPS	Renewable Purchase Specification
Rs.	Indian Rupees
SEZ	Special Economic Zone
SLDC	State Load Despatch Centre
SMD	Simultaneous Maximum Demand
SOP	Standards of Performance
SSP	Sardar Sarovar Project
STU	State Transmission Utility
T&D	Transmission and Distribution
TBIA	Thane Belapur Industries Association
TC	Transmission Charge
ToD	Time of Day
TPC	The Tata Power Company Ltd.

Abbreviation	Expansion
TSSIA	Thane Small Scale Industries Association
TTSC	Total Transmission System Cost
TVS	Technical Validation Session
UI	Unscheduled Interchange
UMPP	Ultra Mega Power Projects
VIA	Vidharba Industries Association
VRS	Voluntary Retirement Scheme
Wef	With effect from
WPI	Wholesale Price Index
WRLDC	Western Regional Load Despatch Centre
WRPC	Western Region Power Committee
y-o-y	Year on Year
ZLS	Zero Load Shedding



# **1 BACKGROUND AND SALIENT FEATURES OF ORDER**

## **1.1 Background**

1.1.1 MSEDCL, is a Company formed under Government of Maharashtra (GoM) Resolution No. ELA – 1003 / P.K.8588 / Bhag-2 / Urja-5 dated 24 January, 2005 from 6 June, 2005 according to the provisions of Part XIII of the EA, 2003. The provisional Transfer Scheme was notified under Section 131(5) (g) of the EA, 2003 on 6 June, 2005, which resulted in the creation of the following four successor Companies and MSEDCL Residual Company from out of the erstwhile Maharashtra State Electricity Board (MSEB), namely,

- a) MSEB Holding Co. Ltd.;
- b) Maharashtra State Power Generation Co. Ltd. (MSPGCL);
- c) Maharashtra State Electricity Transmission Co. Ltd. (MSETCL); and
- d) Maharashtra State Electricity Distribution Co. Ltd.

1.1.2 **Multi Year Tariff Regulations:** On 4 February, 2011, the Commission notified the MYT Regulations. These were to be applicable for determination of Tariff from 1 April, 2011 up to FY 2015-16 for all existing and future Generating Companies, Transmission Licensees and Distribution Licensees in the State of Maharashtra.

1.1.3 **Exemption from MYT Regulations (Case No. 24 of 2011):** MSEDCL submitted a Petition on 22 February, 2011, under Regulations 4.1, 99 and 100 of the MYT Regulations, seeking exemption from the determination of Tariffs under the MYT Regulations. Exemption for two years (till 31 March, 2013) was granted to MSEDCL, under Regulation 4.1, vide the Commission's Order dated 23 August, 2011. Further, under an amendment to the Regulations in 2011, those Distribution Licensees who were exempted for certain periods from the determination of Tariff under the MYT Regulations were permitted to continue to file their Aggregate Revenue Requirement (ARR) and Tariff Petitions under the earlier MERC (Terms and Conditions of Tariff) Regulations, 2005 ('Tariff Regulations').

1.1.4 **Order on Tariff Determination for FY 2012-13 (Case No. 19 of 2012):** MSEDCL filed its Petition for (i) Truing up for FY 2010-11 (ii) ARR for FY 2011-12 and FY 2012-13 and (iii) Tariff determination for 2012-13 and Revision in Schedule of Charges. The Commission's Order was passed on 16 August, 2012, in accordance with the Tariff Regulations, 2005.

1.1.5 **MYT Business Plan Order (Case No. 134 of 2012):** In its Order dated 26 August, 2013, the Commission disposed of MSEDCL's Petition regarding its MYT Business Plan for the second Control Period FY 2013-14 to FY 2015-16. In that Order, the Commission directed MSEDCL to submit its MYT Petition within 60 days.

- 1.1.6 Vide letter dated 22 January, 2014, MSEDCL sought further time of one year for submission of its MYT Petition for Second Control Period, citing uncertainty in the electricity market in India and the difficulty in predicting power purchase and sales, and thereby the ARR. However, the Commission directed MSEDCL to submit its MYT Petition by 31 May, 2014.
- 1.1.7 Accordingly, MSEDCL submitted its MYT Petition for the Second Control Period FY 2013-14 to FY 2015-16 under the MYT Regulations considering the latest available information for FY 2013-14 on 7 June, 2014.
- 1.1.8 **MYT Petition for second Control Period FY 2013-14 to FY 2015-16:** In compliance of the Commission's directives, MSEDCL re-submitted its MYT Petition, based on the Audited Accounts for FY 2013-14, on 4 December, 2014.
- 1.1.9 Vide letter dated 16 December, 2014, the Commission raised preliminary data gaps and sought certain information. MSEDCL submitted its reply to some of the queries on 20 December, 2014.
- 1.1.10 The Commission held a TVS on 24 December, 2014 for the MYT Petition of MSEDCL, to which authorised Institutional Consumer Representatives were also invited. The list of persons who attended the TVS is at Appendix-1.
- 1.1.11 Following the TVS, the Commission directed MSEDCL to address the further data gaps and other concerns identified. MSEDCL submitted its replies on 19 January, 2015.
- 1.2 Admission of the Petition, and Regulatory Process**
- 1.2.1 Accordingly, on 3 February, 2015, submitted its revised MYT Petition with the following prayers:
- "1. To admit the revised MYT Petition as per the provisions of MERC (MYT) Regulations 2011 as amended from time to time and present Petition may please be considered for further proceedings before Hon'ble Commission;*
- 2. To approve the total recovery of Annual Revenue Requirement and Revenue Gap for FY 2013-14 to FY 2015-16 along with other claims as proposed by MSEDCL;*
- 3. To allow to recover the additional charges in case of any variation in the fixed cost of the Central Government Power Station as approved by CERC in line with the CERC (Terms & Conditions of Tariff) Regulations, 2014;*
- 4. To approve mechanism for recovery of computed Revenue Gap and Tariff Schedule from 1st April 2015 considering the Tariff Design principles and other suggestions proposed by MSEDCL;*
- 5. To allow to rationalize the fixed charges for all consumers except BPL Consumers and Agriculture (Metered) consumers to ensure that the fixed expenditure is fully recovered through fixed charges;*
- 6. To approve the revision in the ToD rebate as applicable to consumers having ToD meters from existing level of 250 paise per unit to 150 paise per unit applicable for consumption during night hours (10.00 p.m. to 06.00 a.m. next day).*
-

- 7. To approve the rationalization of Power Factor incentive to 5% for Unity Power Factor;*
- 8. To approve the new tariff slabs and tariffs for the domestic category as proposed by MSEDCL;*
- 9. To approve the merger of continuous and non continuous categories for relevant HT category of consumers considering the improved power supply situation;*
- 10. To approve the proposed energy charges for consumers of LT V – Industrial above 20 kW (above 27 HP) Category equal to energy charge of HT Industrial Category Consumers;*
- 11. To approve the rationalization of Tariffs for Street Lighting for Gram Panchayat A, B & C Class Municipal Councils to the level of average cost of supply for FY 2014-15 and for Municipal Corporation Area around 5% more than the average cost of supply for FY 2014-15;*
- 12. To allow introducing a new consumer category within Low / High Tension category as Government owned, managed and operated educational institutions including higher educational institutes (viz., Zilla Parishad / Municipal Council or Corporation Schools, Govt. Medical/Engineering Colleges etc.) but excluding Government aided educational institutes. Similarly, the said category is proposed to also include Government owned, managed and operated hospitals (viz., District Civil Hospitals, Primary Health Centre etc.);*
- 13. To approve the proposal of MSEDCL to remove the HT Bulk Supply Category requiring a single point supply;*
- 14. To approve the separate category of HT Residential category for the residential consumers availing supply on high tension;*
- 15. To provide tariffs for individual categories as proposed by MSEDCL;*
- 16. To approve the proposal of MSEDCL for revision on conditions for levy of standby charges to CPP;*
- 17. To modify the present provision in respect of “Billing Demand” and the Demand recorded during off peak hours to be considered for billing purpose*
- 18. To approve cross-subsidy surcharge and all such other charges including Wheeling Charges and Losses for Open Access consumers as proposed for FY 2014-15 and FY 2015-16.*
- 19. To allow to charge CSS for FY 2014-15 as calculated by MSEDCL from 1st April 2014.*
- 20. To approve certain charge to the polluting industries towards recovering incremental cost of renewable power purchase,*
- 21. To consider the issue of tariffs for Inter-State Power supply to and from the neighbouring States situated in villages adjacent to State Border;*
- 22. To approve the suggested categorization for different type of activities as proposed by MSEDCL in applicability of tariff;*

23. To allow carrying cost on the deferred recoveries which were approved earlier but the recovery was allowed through MYT Proceedings;
24. To allow MSEDCL to file a separate Petition seeking revision in present Schedule of Charges as and when need arises;
25. To grant any other relief as the Hon'ble Commission may consider appropriate;
26. To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;
27. To condone any error/omission and to give opportunity to rectify the same;
28. To permit MSEDCL to make further submissions, addition and alteration to this Petition as may be necessary from time to time;"

- 1.2.2 The Commission admitted the revised MYT Petition on 13 February, 2015. As required under Section 64 of the EA, 2003, MSEDCL issued Public Notices in two English (Times of India and Indian Express) and two Marathi (Lokmat and Puniyanagari) daily newspapers on 18 February, 2015 inviting suggestions and objections on its Petition. Copies of the Petition and Executive Summary (in English and Marathi) were made available for inspection or purchase at MSEDCL's offices. The Petition was also available on MSEDCL's website ([www.mahadiscom.in](http://www.mahadiscom.in)) free of cost in downloadable format. The Executive Summary of the Petition and copy of the Public Notice were also made available on the websites of the Commission ([www.mercindia.org.in](http://www.mercindia.org.in)) / ([www.merc.gov.in](http://www.merc.gov.in)) in downloadable format.
- 1.2.3 The Commission held Public Hearings at Amravati, Nagpur, Aurangabad, Nashik, Pune and Navi Mumbai during the period from 18 March to 10 April, 2015, as per the schedule in Table 3 below, at which several authorised Consumer Representatives, other stake-holders and members of the public were heard. The Commission also received several written suggestions and objections. The list of persons who attended the Public Hearings is provided in Appendix- II.

**Table 1: Schedule of Public Hearings**

Sr. No.	Venue of Public Hearing	Date of Hearing
1	Navi Mumbai - Conference Hall, 7th Floor, CIDCO Bhavan, CBD, Belapur, Navi Mumbai	Wednesday, 18 March, 2015
2	Amravati - Hall No.1, Divisional Commissioner's Office Camp, Amravati, District – Amravati	Thursday, 26 March, 2015
3	Nagpur - Vanamati Hall, V.I.P. Road, Dharampeth, Nagpur	Friday, 27 March, 2015

Sr. No.	Venue of Public Hearing	Date of Hearing
4	Nashik - Niyojan Bhavan, Collector's Office Campus, Old Agra Road, Nashik	Wednesday, 1 April, 2015
5	Aurangabad - Meeting Hall, Office of the Divisional Commissioner, Aurangabad	Thursday, 9 April, 2015
6	Pune - Council Hall, Office of The Divisional Commissioner, Pune	Friday, 10 April, 2015

- 1.2.4 The Commission has ensured that the due process, contemplated under law, was followed at every stage to ensure transparency and public participation. Adequate opportunity was given to all to present their responses. Various objections raised on the Petition after the Public Notice, both orally and in writing, along with MSEDCL's response and the Commission's Rulings have been summarised in Section 2 of this Order.

### 1.3 Organisation of the Order

- 1.3.1 A list of abbreviations with their expanded forms has been included at the beginning of this Order. Thereafter, this Order is organised in the following Sections:
- 1.3.2 **Section 1** provides a brief background of the process undertaken by the Commission;
- 1.3.3 **Section 2** summarises the written and oral suggestions and objections raised. These are followed by the response of MSEDCL and the Rulings of the Commission;
- 1.3.4 **Section 3** discusses the ARR for MSEDCL for the second Control Period from FY 2013-14 to FY 2015-16. This Section also details the Commission's analysis and approval of various components of the ARR for FY 2013-14 to FY 2015-16;
- 1.3.5 **Section 4** discusses certain amounts claimed by MSEDCL on account of various Judgments of the Appellate Tribunal of Electricity (ATE), expenses previously disallowed by the Commission due to non-submission of information, and computation of the impact of carrying and holding costs and their effect on the net Revenue Gap;
- 1.3.6 **Section 5** discusses the compliance of previous directives issued to MSEDCL, and further directives issued in this Order; and

- 1.3.7 **Section 6** sets out the Commission's Tariff Philosophy and the category-wise Tariffs applicable for FY 2015-16, including determination of Wheeling Charges and Cross-Subsidy Surcharge.
- 1.3.8 **Section 7** summarises the Rulings and Directives of the Commission issued in this Order, followed by the Schedule of revenue at the revised tariffs at Annexure I, and the approved Tariff Schedule at Annexure II of this Order.

## **2 SUGGESTIONS/OBJECTIONS, MSEDCL'S RESPONSE AND COMMISSION'S RULING**

### **2.1 Delay in filing of MYT Petition, and its retrospective application**

#### ***Objections/ Suggestions***

- 2.1.1 Shri Hemant Kapadia (authorised Consumer Representative), Can-Pack India Pvt. Ltd. (Glass Bottles Branch), Hindustan Polyamides & Fibres Ltd., and several others submitted that MSEDCL has delayed the submission of its Petition by more than one and half years.
- 2.1.2 Tata Motors Ltd. contended that the delay in filing the Petition by circumventing the provisions of the MYT Regulations shows MSEDCL's unprofessional approach and also highlights its intention not to provide realistic data. Such delay would enable MSEDCL to avail unwarranted tariff hikes by claiming true up and carrying costs.
- 2.1.3 Hindustan Polyamides & Fibres Ltd. and several others submitted that the MYT framework cannot be applied on a retrospective basis. Applying charges retrospectively will impose an unfair burden on consumers and impact their competitiveness in the global scenario.
- 2.1.4 Castle Rock Fisheries Pvt. Ltd. submitted that, as per Section 61 of EA, 2003, the MYT framework was intended to provide some certainty so that consumers would have a fair idea of what to expect in subsequent years. The present MYT Control Period covers past years and not the ensuing years. It submitted that FY 2015-16 alone is the relevant year in terms of the objective of the MYT framework. In view of this, it requested the Commission not to allow projection of Tariff for a single year under the pretext of MYT.
- 2.1.5 Prayas Energy Group, Pune ('Prayas', an authorised Institutional Consumer Representative), submitted that the MYT Petition has been filed in the last year of the current Control Period. Due to this delay, there is no scope for conducting any mid-term review as envisaged under the MYT Regulations. The Commission has failed to undertake a suo-motu public process for implementing the MYT, and has not initiated any action against MSEDCL under Sections 142 and 146 of the EA, 2003. Instead, the Commission has approved that the present Petition form the basis for public debate, which is a travesty of the MYT process. Hence, any burden arising from such willful negligence and delay cannot be passed on to the consumers through carrying cost for deferred payments and/or Regulatory Assets. It contended that this procedure cannot be termed as a MYT process, and should be termed as true-up of FY 2013-14, performance review of FY 2014-15 and tariff determination for FY 2015-16. The final true-up of FY 2013-14 should be

undertaken in this same process, and no further costs pertaining to that financial year should be allowed.

***MSEDCL's Reply***

- 2.1.6 MSEDCL submitted that, in its Order dated 23 August, 2011 (Case No. 24 of 2011), the Commission exempted the determination of tariff for MSEDCL under the MYT framework till 31 March, 2013 (i.e. for a period of 2 years). On 26 August, 2013, the Commission had issued the Business Plan Order, wherein MSEDCL was directed to submit its MYT Petition within 60 days. However, MSEDCL sought an extension, which the Commission allowed.
- 2.1.7 Thereafter, in its Interim Order dated 3 March, 2014 in Case No. 38 of 2014, the Commission directed MSEDCL to submit its MYT Petition by 31 May, 2014. Accordingly, on 7 June, 2014, MSEDCL submitted its MYT Petition for the Second Control Period, which was based on the latest available information for FY 2013-14. As Audited Accounts for FY 2013-14 became available, MSEDCL submitted a revised MYT Petition on 4 December, 2014.
- 2.1.8 For the reasons mentioned above, submission of the MYT Petition was delayed. In the present Petition, MSEDCL has sought recovery of the Revenue Gap for the Second Control Period (FY 2013-14 to FY 2015-16) in FY 2015-16, i.e., prospectively. MSEDCL added that it has been the practice across the country to claim the retrospective amounts (e.g., truing up amounts, amounts of approved Gap but recovery not allowed) and propose their recovery prospectively.

***Commission's Ruling***

- 2.1.9 The Commission notes that most of the Utilities in Maharashtra had sought exemption from implementation of the MYT Regulations for the initial years of the Control Period. The Commission had granted exemption to them for one to two years, and directed them to comply with the MYT Regulations for the remaining Control Period. Under its Order dated 23 August, 2011, it had accorded a two-year exemption to MSEDCL.
- 2.1.10 In its Order dated 16 August, 2012 in Case No. 19 of 2012 ('Tariff Order'), the Commission directed MSEDCL to submit its MYT Business Plan for FY 2013-14 to FY 2015-16 by 30 November, 2012. MSEDCL did so on 26 December, 2012. In its Order dated 26 August, 2013 on that Business Plan, the Commission directed MSEDCL to file the MYT Petition within 60 days.
- 2.1.11 On the request of MSEDCL, the time period for filing the MYT Petition was initially extended up to 15 December, 2013 and subsequently up to 15 January, 2014. MSEDCL's request for further time thereafter was rejected, and MSEDCL was asked to file its MYT Petition by 31 May, 2014.
- 2.1.12 Accordingly, MSEDCL filed its original MYT Petition on 7 June, 2014. It was revised based on audited Annual Accounts for FY 2013-14 and resubmitted on 4



December, 2014. The Commission notes that, even after follow up, there has been a delay in filing of the MYT Petition by MSEDCL.

- 2.1.13 As regards the retrospective charging cited by various Responders, the Commission has approved the ARR for FY 2013-14 to FY 2015-16 in this Order. While doing so, it has analyzed each head of expenses and revenue submitted by MSEDCL, and has determined the revenue requirement to be passed on to consumers in FY 2015-16 after due prudence check. The revised tariff has been applied only on a prospective basis.

## **2.2 Technical Validation Session**

### ***Objections/ Suggestions***

- 2.2.1 Shri Hemant Kapadia submitted that no TVS was conducted by the Commission subsequent to submission of the revised Petition by MSEDCL. Prayas submitted that a second TVS was demanded, considering the new set of information, by all Consumer Representatives. However, the Commission chose not to conduct a second TVS inspite of the serious issues raised.

### ***MSEDCL's Reply***

- 2.2.2 MSEDCL replied that it has followed all the procedures contemplated under Section 64 of the EA, 2003 while filing the present Petition and its additional submissions.

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

- 2.2.3 The TVS is intended to weed out discrepancies in the Petition and help ensure that adequate data, etc. are incorporated for more informed public consultation and for consideration by Commission in the tariff determination process. In the present Case, the TVS was held on 24 December, 2014. The Institutional Consumer Representatives were invited to the TVS held by the Commission. Following the TVS, the Commission directed MSEDCL to address the additional data gaps. MSEDCL submitted replies on 19 January, 2015. Subsequently, MSEDCL was directed to file a revised Petition incorporating the responses to the data gaps raised prior to and after the TVS. Accordingly, MSEDCL has submitted its revised Petition on 3 February, 2015. Upon satisfying itself that MSEDCL has submitted the necessary data and information in the required formats, the Commission admitted the revised Petition thereafter. Thus, in the Commission's view, the need to hold a second TVS did not arise.

## **2.3 Power Purchase**

### ***Objections/ Suggestions***

#### **a) Power procurement and planning**

- 2.3.1 Captive Power Producers Association (CPPA), Maratha Chamber of Commerce, Industries & Agriculture (MCCIA), Maharashtra Veej Grahak Sangathana (MVGS) and several others submitted that Merit Order Despatch (MOD) principles should be mandatorily followed while arriving at the ARR. MCCIA added that MSEDCL should procure available cheap power to cater to its requirements rather than costly power, so as to reduce its purchase cost and thereby give relief to consumers.
- 2.3.2 Bharat Forge and others submitted that, due to lower Plant Load Factor (PLF) of MSPGCL's Generating Stations, their cost of generation is higher as compared to private and Central sector Generators.
- 2.3.3 Sanjay Techno Products Pvt. Ltd., Aurangabad, submitted that the power purchase cost of MSPGCL is higher by around Rs 1.20 per unit as compared to other Generators.
- 2.3.4 Shri Avinash Prabhune also submitted that the cost of power purchase from MSPGCL is higher than the average cost of other sources. This would have a major impact on the overall power purchase cost of MSEDCL as 40% of power is procured from MSPGCL.
- 2.3.5 Several objectors contended that MSEDCL is not accounting properly for the Auxiliary Power consumption by MSPGCL.
- 2.3.6 Vidyut Urja Equipments Pvt. Ltd., Pune, Vidharbha Industries Association (VIA) (an authorised Institutional Consumer representative), Shri Kiran Paturkar (an authorised Consumer Representative), Federation of Industries Association Vidarbha and several others submitted that, if MSEDCL could reduce power purchase cost for FY 2014-15 to the level of the Chhattisgarh Distribution Utility, it could save Rs. 15,450 Crore (114448 MU x Rs.1.35/unit). If the power purchase cost is reduced to the level of the Madhya Pradesh Central Distribution Company Ltd., an additional amount of Rs. 11,674 Crore (114448 X Rs.1.02/unit) can be saved.
- 2.3.7 Confederation of Real Estate Developers' Association of India (CREDAI) Nagpur Metro submitted that, whereas MSEDCL's average power purchase cost is around Rs. 4.25/unit, it earns only Rs 3.48/unit from trading, resulting in a loss of Rs. 0.78/unit which amounts to Rs. 1024 Crore. The power purchase cost would come down if it is restricted to 114,692 MU for FY 2015-16 as per the Merit Order Stack.
- 2.3.8 Inox Air Products and Mahindra Sanyo submitted that MSEDCL has an obligation to procure power optimally, meaning that it should procure only the quantum of power required to meet its demand. However, this has not been done by MSEDCL, which is consequently burdening consumers, especially industrial consumers, by loading upon them its inefficiency in terms of the cost of unnecessary additional power purchase. They have worked out the total loss to consumers at Rs 1881

- Crore on account of such imprudent power purchase, and urged that it be reduced from the proposed ARR and consequent relief passed on to consumers.
- 2.3.9 Shri Ashish Chandrana (authorised Consumer Representative) submitted that MSEDCL has projected lower power purchase cost from MSPGCL for FY 2015-16 despite the fact that it has proposed to purchase power from new Units of MSPGCL, which are comparatively costlier sources. The Commission should look into this while approving the power purchase cost.
- 2.3.10 Tata Motors submitted that the average power purchase cost of MSEDCL in FY 2013-14 was Rs 3.39 per unit, whereas the rate for sale of surplus power was as low as Rs. 2.03 per unit.
- 2.3.11 The Mill Owners' Association, Mumbai submitted that costly power should not be purchased by MSEDCL, and suggested that the Commission advise GoM to set up stand-alone Hydro power generating Units with cheaper rates, similar to Sardar Sarovar Project (SSP) and Pench.
- 2.3.12 Central Railways contended that the power purchase expenses of MSEDCL are high, resulting in significant increase in the projected ARR for FY 2015-16, and this would result in an unjustifiable increase in tariff.
- 2.3.13 Aam Aadmi Party, Pune, contended that MSEDCL is buying power from both public and private Companies. These Companies have indulged in certain malpractices, which have resulted in an increase in power generation cost by Rs.1/unit.
- 2.3.14 Shri. Shreekar Balwant Soman, Vidarbha Chamber of Commerce & Industry (VCCI), Akola submitted that MSEDCL has not anticipated the growth in demand and not planned for the generation capacity required in future. This has resulted in negligible addition of generating capacity in the State during the last two decades. Due to lack of proper planning, MSEDCL is forced to procure power from costly sources and the burden is passed onto consumers.
- 2.3.15 Prayas submitted that there are large discrepancies in the quantum and cost of power proposed to be procured from MSPGCL. If MSPGCL estimates are to be considered for FY 2015-16, there would be a power surplus of 16,346 MU. However, MSEDCL has projected a power surplus of 13,200 MU only for FY 2015-16. Further if MSPGCL cost estimates are considered, then the ARRs for FY 2013-14 to FY 2015-16 would increase further by Rs. 8,496 Crore. Prayas added that MSPGCL Stations are clubbed together, and their average cost is considered for power purchase projection. This is not a true depiction of the Merit Order, especially since there is a large variation in the cost of generation across MSPGCL Stations.

**b) Power Purchase from Non Conventional Energy Sources**

- 2.3.16 Century Enka Pvt. Ltd. and several others submitted that power purchase cost from Non-Conventional Energy Sources is projected to be very high (Rs. 5.95/kWh) for FY 2015-16. The quantum is 8.6% of total power quantum projected for FY 2015-16. It should be restricted to the minimum, and MSEDCL should focus on purchase from other sources with lower cost.
- 2.3.17 Shri Pratap Hogade and Shri Pramod Khandagale of Maharashtra Veej Grahak Sanghatana (MVGS) and Shri Shakeel Ansari, MECA submitted that renewable power is procured by MSEDCL at a higher rate compared to other States. A competitive bidding process should be followed and transparent procedure should be put in place for purchase of Renewable Energy (RE).
- 2.3.18 MIDC Industrial Association, Amravati suggested that Solar and Wind based generation need to be promoted in the Vidarbha region. Shri B S Khandare suggested that generation from non-conventional power should be promoted from for better energy access and improved energy availability in rural areas..
- 2.3.19 Prof. Shyam Patil, Dhule submitted that the Commission should promote centralised Utility-scale Solar power plants as their cost of generation is lower because of economies of scale. He suggested that the Commission encourage such projects instead of rooftop Solar installations or Solar pumpsets whose per unit generation cost is much higher. Capital could be through public participation in investment in such centralised Solar power projects, and urged the Commission to direct MSEDCL to promote such business models.

**c) Surplus Power**

- 2.3.20 Prayas submitted that MSEDCL has shown the sale of 484 MU as surplus power traded in FY 2013-14 at Rs. 2.03 per unit. Such sale seems to be incidental and not planned. Further, it pointed out a difference of 623 MU in the figures of actual energy exchange between MSPGCL and MSEDCL as per their respective audited Annual Accounts, possibly on account of post-facto accounting settlement.

***MSEDCL's Reply***

**a) Power procurement and planning**

- 2.3.21 MSEDCL procures thermal power from MSPGCL, Central sector generating Stations and Independent Power Producers (IPPs) on firm basis. It also procures power from power trading companies, Power Exchanges and other sources, such as non-conventional and RE sources, e.g. co-generation and Wind power, and surplus power from Captive Power Plants (CPPs).
- 2.3.22 Out of the total power purchase, more than 95% is done at regulated tariffs. The balance required on Round-the-Clock (RTC) basis or for specific periods is purchased through Power Exchanges or through competitive bidding through transparent e-tendering.

- 2.3.23 MSEDCL procures power from various Generators as per the PPA provisions, and schedules it as per the Merit Order Stack. Whenever a situation of surplus power arises, instructions are given to those Generators, including MSPGCL, with a high variable cost to back down, as per MOD principles.
- 2.3.24 Considering the higher cost, it has stopped buying power from RGPPL. It has, therefore, not projected any purchase from it in FY 2014-15 and FY 2015-16.
- 2.3.25 As regards the accounting of MSPGCL's Auxiliary Consumption, MSEDCL submitted that, as per clause 4.3.2 of its PPA with MSPGCL, the energy drawn for Auxiliary Consumption like river water pumping, ash water recovery, ash slurry booster pumps, etc. required for power generation is a part of Auxiliary Consumption. Such Auxiliary Consumption is identified and netted off by the respective O&M Circles. Zero amount bills are raised to the concerned power Station, since bills are to be raised only for energy accounting and netting off purposes. Further, the Energy Audit for the Circle / Division is calculated only after accounting for such Auxiliary Consumption. However, the consumption of residential colonies of MSPGCL supplied by MSEDCL is billed as per the approved Tariff. Earlier, some Circles were issuing energy bills for Auxiliary Consumption, and at some places such Consumption was not considered for energy accounting and reflected as netting off. Considering this, MSEDCL issued guidelines for accounting of such Auxiliary Consumption of MSPGCL. Hence, a proper mechanism for recording and accounting of the Auxiliary Consumption is already in place. .

**b) Power Purchase from Non-conventional Energy Sources**

- 2.3.26 As per the MERC (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2010 ('RPO-REC Regulations'), MSEDCL needs to procure electricity generated from RE sources. For the Second MYT Control Period, the minimum quantum of purchase required from RE sources is 9%. Therefore, in order to meet its Renewable Purchase Obligation (RPO) targets, MSEDCL has to purchase RE at the preferential rates approved by the Commission.
- 2.3.27 MSEDCL submitted that it had taken note of Prof. Shyam Patil's suggestion. However, since the present proceedings are for determination of tariff, he may make suggestions to the Commission at the time of determination of the Generic Tariff for RE Sources.

**c) Surplus Power**

- 2.3.28 Based on the Power Procurement Plan for FY 2014-15 and FY 2015-16 and projected sales, and considering 0.25 % per annum reduction in Distribution Loss, MSEDCL has arrived at its assessment of surplus power. For the purpose of MYT, it has assumed the rate of trading of surplus power as equal to the average power purchase cost for the respective years.

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

- 2.3.29 The Commission has scrutinized the power purchase costs submitted by MSEDCL and verified the availability of power from the existing and proposed sources. Availability from new generating Stations has been considered after analysis of realistic dates of commissioning of the Projects. The Commission has scrutinised and analysed the Station-wise cost of generation of MSPGCL in its MYT Mid-Term Review (MTR) Order in Case No. 15 of 2015, which has also dealt with the issue of Auxiliary Consumption. It has covered energy accounting-related aspects under the Energy Balance Section in Chapter 3 of this Order. While considering the projected power procurement plan for FY 2015-16, the Commission has applied approached the issue of optimal power procurement mix considering Merit Order principles for least-cost procurement. The Commission's views and detailed analysis of MSEDCL's power purchase quantum and costs for FY 2013-14 to FY 2015-16 are set out in Chapter 3 of this Order.

## **2.4 Capital Expenditure**

### ***Objections / Suggestions***

- 2.4.1 The Meadows Holidays and Resorts Pvt. Ltd., Chamber of Marathwada Industries and Agriculture (CMIA), Marathwada Association of Small Scale Industries & Agriculture (MASSIA) and others submitted that the capital expenditure of MSEDCL and MSPGCL is 1.5 times more than a private Generation Company's. Strict controls should be applied to keep the expenditure within limits. Audit should be carried out to check the actual expenditure and its purposefulness.
- 2.4.2 Vidyut Urja Equipments Pvt. Ltd., VIA, Federation of Industries Associations of Vidarbha and others submitted that there has been a continuous increase in capital expenditure, thereby increase in burden on consumers.
- 2.4.3 Shri. Shreekar Balwant Soman of VCCI, Akola submitted that MSEDCL has proposed capital expenditure of Rs. 3554 Crore for FY 2015-16. However, industrial consumers are suffering for want of adequate infrastructure. MSEDCL should clarify the rationale for such high capital expenditure without much benefit to industrial consumers.
- 2.4.4 Jindal Poly Films Pvt. Ltd. Contended that the benefits of capital expenditure schemes are not seen, and it is not fair to burden these expenses on consumers such schemes are not effective in reducing the electricity tariff.
- 2.4.5 Prayas submitted that there has been a steep increase in capital expenditure-related costs since FY 2011-12. No analysis or evaluation has been provided by MSEDCL on how this has contributed to improvements in supply and service quality.

### ***MSEDCL's Reply***

- 2.4.6 MSEDCL submitted that the basic objective of incurring capital expenditure is to upgrade the ageing and weak distribution network to desirable standards so as to

provide better network reliability and sustainable performance. Timely capital expenditure is required for strengthening the system to ensure quality, security and availability of power supply to the consumers, for system development, to meet the load growth, to achieve the targeted reduction in system losses, to undertake automation and other improvement works, to enhance customer service and to fulfill social obligations such as electrification of un-served areas.

2.4.7 The Commission has given in-principle approval to all infrastructure schemes with capital expenditure above Rs. 10 Crore, and has scrutinized the proposed expenditure while doing so. Further, Cost Benefit Analysis (CBA) for all such schemes is submitted to the Commission for scrutiny and prudence check. The reduction in Distribution Loss, increase in collection efficiency, increase in new connections and reduction in the time taken for it, are some of the tangible benefits of capital expenditure which MSEDCL has achieved.

2.4.8 MSEDCL conducts internal audit of accounts, including all expenditure related to infrastructure projects. The accounting information is further audited by a statutory auditor empanelled with the Comptroller and Auditor General of India (CAG). In addition, the Annual Accounts are also audited by CAG as a part of the supplementary audit, as provided in the Companies Act, 1956. While scrutinizing the ARR/APR Petitions, the Commission also undertakes prudence checks. Hence, no additional supervision and further scrutiny of capital expenditure is necessary.

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

2.4.9 The Commission has noted the objections in this regard, and MSEDCL's replies. The Commission's observations in respect of excess capitalisation vis-a-vis in-principle approved costs are elaborated in Chapter 3. In that Chapter, the Commission has also analysed MSEDCL's capital expenditure and capitalisation claims, and given certain directives.

## **2.5 Operation and Maintenance Expenses**

### ***Objections / Suggestions***

2.5.1 VIA, Federation of Industries Associations, Vidarbha and others submitted that the Petition has not segregated the Operation and Maintenance (O&M) expenses for FY 2014-15 and FY 2015-16. There is a steep increase of 243% over a period of six years from FY 2010-11.

2.5.2 Shri Pratap Hogade and Shri Pramod Khandagale of MVGS, and MECA submitted that a large increase in O&M Expenses has been projected, including on salaries of MSEDCL employees, which needs to be scrutinised.

2.5.3 Shri. Shreekar Balwant Soman of VCCI, Akola submitted that O&M Expenses of Rs 7123 Crore projected for FY 2015-16 are too high. He added that MSEDCL insist on engaging labour on contract basis instead of utilizing its own staff to undertake O&M activities. Further, despite large payments to the contractors, the efficiency and quality of work is not upto the mark.

- 2.5.4 Prayas submitted that MSEDCL has not treated O&M related costs as controllable parameters. No analysis or explanation has been provided regarding the sharp increase in employee expenses.

***MSEDCL's Reply***

- 2.5.5 Regulations 78.4.1 and 92.7.1 of the MYT Regulations specify the norms for O&M Expenses for Distribution Wires and Retail Supply Businesses, respectively. MSEDCL has calculated the O&M Expenses for the period FY 2013-14 to FY 2015-16 based on these norms. However for FY 2013-14, the actual O&M Expenses have been considered, which are lower than the normative.

***Commission's Ruling***

- 2.5.6 The Commission has considered the O&M Expenses for the Distribution Wires and Retail Supply Businesses separately as per the MYT Regulations. It has also treated O&M Expenses as a controllable parameter and considered the sharing of gains and losses for FY 2013-14 in accordance with the Regulations. O&M Expenses allowed over the Control Period have been detailed in Chapter 3 of this Order.

**2.6 Sales and Energy Balance**

***Objections / Suggestions***

- 2.6.1 Shri Kiran Paturkar, Federation of Industries Associations, Vidarbha submitted that the ARR of MSEDCL has increased by 93% over a period of six years from FY 2010-11 to FY 2015-16, whereas sales have increased by only 30.91%. This needs to be looked into.
- 2.6.2 Bharat Forge submitted that, while working out the Energy Balance, MSEDCL has merged the sales to Extra-High Voltage (EHV) consumers with sales to High Tension (HT) consumers (33 kV, 22/11 kV and Low Tension (LT) level), thereby trying to reduce its derived Distribution Loss. MSEDCL should show the sale to EHV consumers separately.
- 2.6.3 Tata Motors submitted that HT category sales projections for FY 2014-15 and FY 2015-16 are very much higher than past sales, resulting in incorrect projection of power purchase quantum and cost. This would lead to undue tariff hike to diligent consumers during FY 2015-16. The sales projections for HT-I Industry and HT-II Commercial category should be reduced, considering the actual sales in the last 3 years.
- 2.6.4 Prayas submitted that, while making sales projections, MSEDCL has considered developments which would increase sales but not those that might lead to reduction. The HT Industry and HT Commercial categories, respectively, have seen 11% and 5% drop in sales between FY 2012-13 and FY 2013-14, and this trend is bound to continue. However, the projections in the Petition are



independent of these likely changes, and MSEDCL has considered 7% annual growth.

***MSEDCL's Reply***

- 2.6.5 Considering the present status of the economy and the overall situation of the market, Maharashtra has been doing well. Despite slow growth in industrial consumption, overall energy sale in the State has increased. MSEDCL has submitted the sales composition during FY 2011-12 to FY 2013-14. Considering the impact of Open Access (OA), HT Credit and OA Offset sales, Industrial category sale in the MSEDCL area has been increasing.
- 2.6.6 Considering overall sales and 24x7 power availability, MSEDCL expects that sales to the Industrial category will increase and has, therefore, considered a realistic growth of 7% in FY 2015-16.
- 2.6.7 As regards the issue of EHV sales in Energy Balance, MSEDCL calculates the Energy Balance considering metered input energy and sales, irrespective of voltage level, for all its consumers. Hence, being consumers of MSEDCL, losses of all EHV consumers form an integral part of MSEDCL's Distribution Loss.

***Commission's Ruling***

- 2.6.8 In the present Order, the Commission has undertaken a detailed analysis of MSEDCL's sales projections. The Commission's views and analysis on category wise sales growth rate are set out in Chapter 3.

**2.7 Interest on Working Capital and Consumer Security Deposit**

***Objections / Suggestions***

- 2.7.1 Tata Motors sought clarification regarding accounting of Consumers' Security Deposit (CSD) for the purpose of working capital computation. MSEDCL should submit the audited monthly cash flow statement, and the Commission may validate it before approving the Interest on Working Capital (IoWC) as part of the ARR for FY 2014-15 and FY 2015-16. Tata Motors also pointed out that, while computing the working capital requirement, MSEDCL has included the incentive paid to Distribution Franchisees.
- 2.7.2 Shri Pratap Hogade and Shri Pramod Khandagale of MVGS and Shri Shakeel Ansari, MECA drew attention to the fact that MSEDCL has considered an amount of Rs. 2445 Crore towards IoWC, interest on CSD and Other Finance Charges for FY 2014-15. They pointed out that this total amount includes Rs. 1532 Crore towards interest payable to contractors and suppliers for delayed payment by MSEDCL. Interest on account of delays in payment by MSEDCL should not be allowed.

***MSEDCL's Reply***

- 2.7.3 Working capital is required mainly to meet the liabilities on fuel and power purchase and is beyond the control of MSEDCL. MSEDCL has a yearly overdraft limit of approx Rs. 1500 Crore from 3 banks for meeting its monthly cashflow requirement. It has also been availing short-term loans from various banks for a period of 3 months. Moreover, MSEDCL has been incurring financing costs for meeting its working capital requirements.
- 2.7.4 MSEDCL has submitted the monthly cash flow statements for the period from FY 2010-11 to FY 2012-13 in its Petition, and subsequently also for FY 2013-14 as sought by the Commission.

***Commission's Ruling***

- 2.7.5 The Commission has dealt with this issue in detail in the Section on IoWC under Chapter 3 of this Order. The Commission's treatment of CSD and delayed payment charges is also elaborated in the Chapter 3.

**2.8 Recovery of arrears**

***Objections / Suggestions***

- 2.8.1 Shri Hemant Kapadia pointed out that arrears of recovery from agricultural consumers have reached Rs 6000 Crore.
- 2.8.2 Urja Sahyog submitted that large arrears of various consumers such as Government, public sector utility consumers, Municipal Corporations, Municipalities and Gram Panchayats will have an impact on the revenue shortfall of MSEDCL. Recovery of these arrears would reduce the burden on consumers.
- 2.8.3 Shri. Shreekar Balwant Soman, VCCI, Akola stated that, on the one hand, MSEDCL is claiming that 96.13% of current bills are recovered regularly and there are low arrears of previous years; on the other hand, around one third of its total arrears of Rs 26500 Crore is towards current arrears. The arrears to be collected from the Mula Pravara Electric Cooperative Society (MPECS) alone are more than Rs. 2000 Crore, and no action is being taken to recover them. Instead of recovering these large arrears, MSEDCL is imposing this burden on consumers through annual tariff hikes.
- 2.8.4 Shri B S Khandare urged that, of this large amount of arrears, recovery should be done from large consumers first.
- 2.8.5 Shri Nasimuddin Ansari and others suggested that schemes along the lines of 'Krishi Sanjeevani Yojana' need to be instituted for waiving the interest on delayed payments and Delayed Payment Charges (DPC) for all categories of consumers, including Powerloom industries.
- 2.8.6 Taloja Manufacturers Association submitted that there are huge arrears of recovery from agricultural consumers who continue to use pumpsets without paying bills. MSEDCL should request the State/Central Governments to first adjust the

electricity bills payable by them from any subsidy to be given due to drought, floods, etc.

- 2.8.7 Shri Yusuf Mohd. Shaikh pointed out that MSEDCL has bulk arrears of dues from MPECS, and the Aurangabad, Nagpur, Jalgaon and Bhiwandi Distribution Franchisees, which need to be recovered at the earliest.

***MSEDCL's Reply***

- 2.8.8 The arrears of consumers of different categories are mounting and effective and concerted efforts are required for recovering them. MSEDCL submitted that its collection efficiency for Residential, Commercial and Industrial categories is in the range of 97% to 100%. However, collection efficiency in respect of Street Light (60%), and Agriculture (37%) is lower, which MSEDCL is striving to improve. However, it is also necessary to examine the reasons for the accumulation of arrears, the permissible action which could be taken for recovery, the period for such recovery process and the limitations of MSEDCL resorting to coercive action. MSEDCL takes several measures from time to time for recovery of arrears such as issuance of notices, disconnection of power supply and filing of legal suits.
- 2.8.9 To facilitate payment of arrears by consumers, facilities such as payment by easy installments, waiver of minimum charges, waiver of DPC and concessional interest etc., are provided. Besides, wide publicity is given to recovery drives. In line with the Commission's directions, MSEDCL has identified all the arrears that in its opinion are not collectible, and has written them off. Bad Debts are written off in its Books of Accounts on the basis of Board Resolutions.
- 2.8.10 Further, in response to data gaps, MSEDCL has submitted that the total arrears from Distribution Franchisees (DF) as on November 2014 amounts to Rs. 418.7 Crore comprising Rs. 46.60 Crore (Nagpur DF), Rs. 67.09 Crore (Jalgaon DF), Rs. 270.18 Crore (Aurangabad DF) and Rs. 34.83 Crore (Bhiwandi DF).

***Commission's Ruling***

- 2.8.11 In its Tariff Order in Case No. 19 of 2012, the Commission had addressed the arrears of MSEDCL, and stated that:
- "The Commission is of the view that though arrears do not affect the determination of ARR directly, it is important to collect arrears on time to maintain liquidity and reduce the need of working capital. MSEDCL has recently reported serious liquidity problems affecting its working capital and strictures from banks to deny financing of working capital."*
- 2.8.12 Concerted, rigorous and consistent efforts are necessary to reduce the arrears. This would substantially improve MSEDCL's liquidity and financial position and benefit consumers. MSEDCL should have a clear road-map and action plan, with Division-wise targets and fixing of responsibility for recovery of arrears. MSEDCL should also take immediate steps to recover arrears from Franchisees. MSEDCL should ensure timely recovery and operationalisation of the payment security

mechanism in accordance with the Franchisee Agreements. Certain directions in this regard have been given subsequently in this Order.

- 2.8.13 The Commission directs MSEDCL to submit its action plan for recovery of arrears and also publish on its website the quarterly report on status of arrears and recoveries made during the quarter against each consumer category and across all Circles.

## **2.9 Provision for Bad debts**

### ***Objections / Suggestions***

- 2.9.1 Jindal Poly Films Ltd. Urged that the provisioning allowed towards Bad Debts during the MYT Control Period should be reduced.
- 2.9.2 Shri Hemant Kapadia contended that there is a lack of proper orientation towards recovery which leads to creation of Bad Debts. The recovery of arrears through legal procedures remains a major challenge for MSEDCL.
- 2.9.3 R.L. Steels & Energy Limited pointed out that MSEDCL's provisioning for Bad Debt is three times the amount of its Income Tax.
- 2.9.4 Shri Kiran Paturkar, Federation of Industries Associations Vidarbha submitted that, since FY 1999-2000, the Commission has been allowing 1.5% of revenue as Bad Debts to MSEDCL, and this amount is added into the tariff. He contended that many other State Electricity Regulatory Commissions are not allowing any amount as Bad Debts. Moreover, even after allowing 1.5% revenue as Bad Debts, the arrears of MSEDCL are increasing at an alarming level.
- 2.9.5 Tata Motors submitted that, under the relevant provisions of the MYT Regulations, MSEDCL has considered Rs. 353 Crore as provision for Bad Debts in FY 2013-14. For its computation, it has considered trade receivables of Rs 11,601 Crore, which includes a component of GoM subsidy. However, the GoM subsidy cannot be treated as receivables. Hence, the provisioning towards Bad Debts should be reworked after deducting the GoM subsidy from the receivables.

### ***MSEDCL's Reply***

- 2.9.6 Bad Debts are an inseparable part of every business, including electricity distribution. The Commission has been following the principle that Bad Debts shall not exceed 1.5% of revenue in any financial year and accordingly approving the provision on a normative basis.
- 2.9.7 Regulations 78.6 and 92.9 of the MYT Regulations specify that the provision for Bad and Doubtful Debt may be allowed up to 1.5% of the receivables shown in the Audited Accounts of the Distribution Licensee duly allocated for the Wires and Supply Business. Accordingly, MSEDCL has allocated the amount shown as receivables in its Audited Accounts of FY 2013-14 in the ratio of 10% to Wires Business and 90% to Supply Business, and calculated the provision for Bad Debts.

- 2.9.8 In reply to the objections of Tata Motors, MSEDCL submitted that it has claimed the provision for Bad Debts considering the MYT Regulations.

***Commission's Ruling***

- 2.9.9 The Commission observes that the provisioning for Bad Debts is allowed under the MYT Regulations. However, efforts should be made to minimize the Bad Debts to the extent possible, and Licensees must have prudent policies to deal with Bad Debts recovery and write-off. The Commission has dealt with this issue in Chapter 3 of this Order.

**2.10 Metering, Billing, Energy Audit and System Losses**

***Objections / Suggestions***

- 2.10.1 Shri Avinash Prabhune urged that MSEDCL be directed to take action for 100% DTC metering, Feeder metering and agricultural pump metering. MSEDCL should take corrective actions to control power theft and improve collection efficiency and arrears.
- 2.10.2 Urja Prabhodan Kendra, Mumbai submitted that MSEDCL should clarify the basis of estimation of un-metered category consumption. Shri Dilip Bhattalwar also contended that the basis for estimation of consumption on un-metered connections is not clear. He added that, as the agriculture billing is done on HP or kW per month basis, consumption by this category is only an assessment. Hence, all such connections should be immediately converted to metered connections, and the Energy Balance on actual metered consumption should be published.
- 2.10.3 Green Earth Social Development Consulting Pvt. Ltd, Pune submitted that it is essential to stop un-metered supply of electricity to agricultural consumers. Meters should be installed for un-metered agriculture supply within a time frame stipulated by the Commission. The agricultural tariffs also need to be kept on par with the Cost of Supply, especially for those who grow water-intensive crops such as sugarcane.
- 2.10.4 Shri Ashish Chandrana submitted that MSEDCL has not completed 100% metering of DTCs within the stipulated period of one year, and have thus not complied with the Commission's Tariff Order in Case No. 19 of 2012. The Commission should take note of this violation and initiate suo-moto non-compliance proceedings. He pointed out that Section 55 of the EA, 2003 specifically states that no un-metered supply can be made after two years from the date of its notification. Despite this, MSEDCL is unlawfully proposing a tariff for un-metered agriculture consumers, and the Commission has also approved it in past Tariff Orders.
- 2.10.5 Maharashtra Rajya Irrigation Federation, Shri Pramod Khandagale (MVGS) and others submitted that electricity consumption by agricultural pumps has been shown as around 25%, which is unrealistic, and that the HP load of un-metered

- consumers has been reported as higher than is actually the case. All agricultural pumps must be provided with meters immediately in order to realize their actual consumption, and third-party energy auditors should be appointed to determine the losses due to agricultural pumps.
- 2.10.6 Shri R.B. Agrawal submitted that more than 1 lakh rich farmers in Amravati District have been provided electricity without meters. He and others submitted that many agricultural consumers in western Maharashtra are using discounted Agriculture category electricity for small agriculture-related industries, often without meters. This leads to a huge loss, and is a malpractice by MSEDCL employees. Shri B S Khandare submitted that many farmers are using higher capacity pumps at lower tariffs.
- 2.10.7 Shri Shyamal Banerjee, Advocate urged that MSEDCL should ensure 100% metering of all un-metered consumers and consumers with defective/burnt meters, so that the AT&C losses can be reduced. For reduction of AT&C losses, MSEDCL implement Feeder metering at 33 kV and 11 kV levels. MSEDCL should also remove defective meters and install correct meters at the Distribution Transformer level. It is necessary for MSEDCL to develop a roll-out plan with IT automation modules so as to reduce AT& C losses.
- 2.10.8 Shri Rajesh Ankushrao Tope stated that 100% metering of all un-metered consumers should be ensured. He suggested that there should be special wing in MSEDCL to curtail technical loss and commercial loss.
- 2.10.9 Urja Sahayog submitted that MSEDCL should furnish details of the percentage of faulty meters.
- 2.10.10 Shri B.S. Khandare stated that it is the responsibility of MSEDCL engineers to make sure meter seals are intact and that any meter wiring is undertaken in their presence. Meters need to be examined by MSEDCL officers at least once in 3 years.
- 2.10.11 Several Responders, through written submissions and also at the Public Hearing, contended that MSEDCL is not following a proper mechanism for delivery of bills. They suggested that MSEDCL monitor the bill distribution work undertaken through out-sourced agencies.
- 2.10.12 Shri Ashok Vairagade and Shri Sameer Kamble highlighted the issue of wrong/fake readings and escalated electricity bills. Shri Lokanayak Jaiprakash Narayan Shetkari Sahakari Soot Girni Ltd. submitted that Feeder & DTC metering is not done properly.
- 2.10.13 Shri Uttam Shankar Saundale submitted that meter reading and billing is not done properly by the contracted agencies, and wrong bills are provided to agriculture pump consumers based on average readings. Even after filing Right to Information (RTI) applications, no proper information is provided about this process by MSEDCL. MSEDCL engineers should cross check at least 5-10% of the readings

taken by contracted agencies by visiting the meter locations, and faulty meters should be replaced so that accurate readings can be taken.

***MSEDCL's Reply***

- 2.10.14 MSEDCL has over 36 lakh Agriculture consumers, out of whom approximately 16 lakh are un-metered and the rest metered. It has a widespread network throughout its Licence Area, and has been releasing agricultural connections daily on a large scale across the State.
- 2.10.15 Ascertaining the un-metered sale in the Agriculture category for proper energy accounting is a difficult task, and is addressed by MSEDCL through Indexing of consumption of normal metered consumers. The Indexing methodology has been approved by Commission. This methodology was developed in FY 2006-07, and subsequent refinements were made to arrive at the sub-Divisional Index instead of the earlier Zonal Index.
- 2.10.16 As per the scientific methodology followed by MSEDCL, un-metered sale in the agricultural category is treated as function of metered consumption. The un-metered consumption is computed by applying a capped Normal Meter Index to the corresponding un-metered HPs. The former one is derived from the sub-Division-wise capped consumption of consumers having normal meter reading status and their corresponding Connected Load (HP).
- 2.10.17 As regards billing and energy accounting of agriculture consumers, MSEDCL stated that Agriculture consumers are billed during the last month of every quarter. As such, 1/3rd of their apportioned consumption is considered for the ensuing two months of the next quarter, based on quarterly consumption recorded in the previous quarter, and after considering seasonal variations, if any. This affects the monthly and quarterly energy accounting figures. However, for the year as a whole, the agricultural consumption is reflected correctly in the energy accounts.
- 2.10.18 As regards the projection of un-metered agriculture consumption (Units/ HP) for FY 2014-15 and FY 2015-16, MSEDCL has already initiated the conversion of every un-metered agriculture connection to a metered connection. Hence, a decrease in Connected Load has been projected for un-metered agriculture consumers. Pro rata reduction has also been considered in energy sales to un-metered agriculture consumers for any decrease in the Connected Load, considering the same consumption pattern. Considering all parameters remaining the same and pro rata reduction in the sales with Connected Load, the Unit/HP remains the same during MYT Period. MSEDCL has a dedicated Department to ensure that proper energy accounting is undertaken and no dumping of sales of any category is allowed. However, in view of the allegations of such dumping, MSEDCL welcomes any support from consumer groups / representatives so as to address this concern in a more transparent manner.

- 2.10.19 Although it has made several attempts to expeditiously install meters for all the un-metered agricultural consumers, MSEDCL has faced two major hurdles, viz., strong opposition from consumers and the need for large capital expenditure. There have been instances of removal, damaging and throwing of installed meters forcefully by mobs and man-handling of its staff, creating law and order situations during metering. There is also an acute shortage of good quality 3-phase static energy meters, which is making it difficult to implement the programme of providing meters to un-metered agricultural consumers.
- 2.10.20 Subsequent to the Public Hearing, MSEDCL stated that it would shortly submit a revised metering plan for un-metered connections, with a shorter target time-frame.
- 2.10.21 Though bill distribution is done through different agencies, MSEDCL closely monitors the work carried out by them. Wherever complaints are received, immediate corrective steps, including imposing of fines on the agencies, are taken. Bills are also made available on its website ([www.mahadiscom.in](http://www.mahadiscom.in)), with a facility of bill intimation through e-mails. MSEDCL has also initiated a Feeder Franchisee Programme on pilot basis, and expects that the issues raised regarding delivery of bills would be addressed through that scheme. As regards individual consumer billing complaints, necessary instructions and guidelines have been issued and compliance is periodically monitored at the Head Office level. MSEDCL agreed with the suggestion of random checking of energy bills by senior officers.

***Commission's Ruling***

**a) Metering of un-metered Agriculture Consumers:**

- 2.10.22 The Commission notes the strong views expressed against the present status of metering and Energy Audit of un-metered Agriculture consumers. It is the responsibility of MSEDCL as a Licensee to meter all consumers as per Section 55 of the EA, 2003. Some years ago, in its Order dated 13 October, 2006 in Case No. 13 of 2006, the Commission had rejected MSEDCL's prayer for extending the statutory time limit (two years from the notification of the EA, 2003) to five years for installing correct meters for agricultural consumers. However, in its Tariff Order dated 16 August, 2012, the Commission directed MSEDCL to submit an action plan for metering of all un-metered consumers.
- 2.10.23 More recently, in its Order in Case No. 38 of 2014 dated 11 June 2014, the Commission observed that MSEDCL has submitted its Feeder-wise Agriculture Metering plan. Out of a total 6,980 Agriculture Feeders, MSEDCL had proposed to cover all un-metered agriculture connections on only 500 Agriculture Feeders, in two years. The Commission opined that this would mean a very long time to complete metering of un-metered Agriculture consumers. Therefore, it directed MSEDCL to revise its plan for implementation in a shorter time and submit it with its MYT Petition. Accordingly, MSEDCL has submitted a revised plan.



- 2.10.24 In its revised road-map, MSEDCL has proposed to complete metering of around 16 lakh un-metered agriculture consumers by FY 2021-22, at an estimated capital expenditure of Rs 759.52 Crore.
- 2.10.25 As per Section 55 of the EA, 2003, supply of electricity shall be done only through a correct meter. All un-metered consumers within the License area should be converted to metered and therefore the action plan for the same should be prepared accordingly and implemented seriously by MSEDCL. Upon perusal of the present action plan, it is observed that MSEDCL is considering a longer timeline of around seven to eight years, for the entire conversion of un-metered consumers to metered consumers. The Commission is of the view, that MSEDCL should set more aggressive timelines for completing the conversion, considering the importance of the same. The expeditious completion of the metering for un-metered agriculture connections is the need of the hour to ensure accurate assessment of consumption by agriculture sector and also to ascertain circle-wise Distribution Loss.
- 2.10.26 In this context, the Commission directs MSEDCL to complete the metering within a period of 3 years such that by the end of FY 2017-18, the entire un-metered consumption should be converted to metered consumption. The Commission hereby directs MSEDCL that it should modify its current metering plan in accordance with above timelines and submit detailed circle-wise/sub-Division-wise revised metering plan for agriculture consumers within 60 days from date of this Order. While developing such metering plan, priority should be accorded for metering of un-metered connection with Connected Load in excess of 5 HP. Further, the Commission opines that MSEDCL should encourage voluntary participation by interested un-metered agricultural consumers for conversion to metered connection and should be taken up on priority. The region-wise planned metering programme should not pose constrain for installation of meters for such voluntary conversion to metered connection.
- 2.10.27 Various difficulties as highlighted by MSEDCL as possible roadblocks in implementing the metering plan should be addressed through suitable technical and management solutions and also by fixing responsibilities at appropriate levels at circle/sub-Division level to ensure proper functioning and reporting of metering facilities. The Commission directs MSEDCL to submit its report to the Commission on the progress of implementation of the metering plan, in its next Tariff Petition.
- 2.10.28 At the same time, the Commission is cognizant of the scale and the ground realities of metering of all un-metered consumers, which are common to other parts of the country also, and some aspects of which have been pointed out by MSEDCL. Until the above metering plan is fully implemented, the supply to un-metered agriculture consumers would continue, and cannot be allowed without any tariff. The flat rate tariff structure (Rs/HP/month) for such un-metered Agriculture consumers will have to continue for the time being. The Commission has determined the tariff

accordingly in Chapter 6 of this Order. However, in order to promote metering, the Commission has further increased the difference between the Average Billing Rate (ABR) of un-metered and metered Agriculture connections.

**b) Third-party Audit, and Index for Un-metered Consumption:**

- 2.10.29 In its Tariff Order, the Commission had directed MSEDCL to carry out, through an independent third-party, detailed Energy Audit for some representative Feeders supplying power to un-metered agriculture consumers. Subsequently, MSEDCL submitted a report to the Commission stating that it had appointed an internal Committee of senior officers under whose guidance certified energy auditors within MSEDCL carried out an analysis of the agriculture consumption Index determination. However, apart from the fact that it was based on an in-house exercise, MSEDCL's short report did not provide the detailed basis and analytical framework from which it had inferred that the present methodology is accurate. Therefore, vide letter dated 9 May, 2013, the Commission directed MSEDCL to submit the complete report comprising the numerical analysis details and report of Energy Audit of sample agriculture Feeders carried out.
- 2.10.30 MSEDCL submitted the detailed Energy Audit Report for sample agriculture Feeders vide its letter dated 21 September, 2013. From the Committee's Report, it is seen that, instead of appointing third-party independent energy auditors from outside, the activity was carried out through BEE-certified departmental technical personnel, under the supervision and guidance of the internal Committee. The Committee verified the authenticity of the ongoing method for computation of un-metered agriculture consumption through different methods of computation and it observed that the current method finds its base resembling closely to the Index computed by weighted average consumption method. Hence, the present method of determination of sub Division-wise un-metered AG-Index was found to be authentic and expected to be continued undoubtedly for computation of un-metered Agriculture sale.
- 2.10.31 The Commission observes that the findings of the internal Committee for validation of methodology and determination of un-metered agriculture consumption Index (i.e. sub-Division-wise weighted average Index) are based on limited sample size and analysis of a limited period of one quarter. For the purpose of the exercise, around 387 Feeders spread across 39 sub-Divisions over 8 agriculture-dominated Zones for one quarter (April-June, 2012) were considered.
- 2.10.32 The Commission is of the view that in order to ensure credence to the study, third party verification and validation of the methodology, the selection of sample feeders and determination of un-metered Agriculture Index is required to be undertaken through a competent third party. As observed in earlier paragraphs, around 43% of agriculture connections are still un-metered and it is expected that with directions given for revised metering plan, MSEDCL shall to accomplish complete metering over the next three years.

- 2.10.33 Thus, the practice for assessment of agriculture consumption is likely to continue for some time and hence determination of agriculture consumption Index for un-metered consumption assumes great significance. Third-party independent assessment Energy Audit of the methodology and determination of the Index would ensure independence and transparency required in such an exercise. In view of the above, the Commission will appoint a third-party agency for the methodology and verification of agricultural sales required to determine sub-Division / Division-wise weighted average consumption Index for un-metered agriculture connection.

**c) Issues relating to Metering, wrong Billing, and delay in Bills**

- 2.10.34 The Commission has noted several objections and complaints in respect of metering, wrong billing and delay in delivery of bills etc. The Commission has taken serious note of these deficiencies in the customer related processes and service delivery related issues which not only affect the consumers but also results in commercial loss for the distribution utility. The Commission opines that it is unfortunate that the consumer is unable to claim prompt payment rebate simply because the metering, billing and bill delivery mechanism are not aligned. Addressing this billing process related issue is crucial and should be taken up on priority, as improving billing and collection cycle efficiency would ease out the liquidity position for MSEDCL as well. The Commission opines that MSEDCL should explore use of technological solutions to enhance its customer outreach activities through mobile alerts, e-bills through emails to desirous consumers as a part of go green initiative, and should also explore more payment options to facilitate online payment and payment gateways.
- 2.10.35 The Commission recognizes that innovative measures proposed by MSEDCL for Feeder based Franchisees on a pilot basis may be worth exploring. However, at the same time, MSEDCL should review its billing related processes, identify current limitations/gaps and areas for improvement and take corrective steps and monitor the implementation of necessary actions at the highest level. Further, MSEDCL may also conduct third party process audit of its billing processes including audit of its billing software/system.

**2.11 Distribution Loss**

***Objections / Suggestions***

- 2.11.1 Veej Grahak Sanghatana (Vasai), Janata Dal (Secular) and Nirbhay Jan Sanstha submitted that strong action should be taken to reduce Distribution Losses from the current level of 30% to around 12%. Vigilance squads should be appointed (excluding local officers and staff) to initiate stringent action against power theft and unauthorised power connections.

- 2.11.2 The Meadows Holidays and Resorts Pvt Ltd., CMIA, Bright Steel Corp., MASSIA, Trimurti Foods and others submitted that third-party/independent audit should be undertaken to find out the actual Distribution Loss of MSEDCL.
- 2.11.3 Shri Nasimuddin Ansari and others submitted that the Commission, in various Cases in the last 12 years, has issued several directives to MSEDCL to reduce its Distribution Losses. However, MSEDCL is not complying with these directives.
- 2.11.4 Taloja Manufacturers Association submitted that MSEDCL should state its plan to reduce its Distribution Losses. CREDAI, Nagpur submitted that MSEDCL should have an aggressive target of 5% loss reduction in the LT category, and the ARR needs to be allowed accordingly.
- 2.11.5 Some Responders raised issues regarding information on loss-making Feeders. It was also urged that there should be proper arrangements for monitoring and identifying Feeders with higher losses.
- 2.11.6 M/s R.L Steel Ltd. submitted that MSEDCL has not achieved the interim target of 26.8% for losses as per the Commission's first Tariff Order dated 5 May, 2000.
- 2.11.7 Steel Authority of India Ltd. (SAIL), Chandrapur submitted that the Circles where Distribution Losses are low should get an incentive. MIDC Industrial Association, Amravati submitted that area-wise tariff rates for electricity should be different depending on the losses to be borne by consumers in that area.
- 2.11.8 Shri Vivek Velankar, Sajag Nagrik Manch submitted that the Distribution Loss level should be fixed at 10% for the determination of tariff. Zones with higher Distribution Losses should be imposed with a 'variable loss surcharge'. MSEDCL employees and officers should be penalised if this loss level is not brought down.
- 2.11.9 Green Earth Social Development Consulting Pvt. Ltd., Pune submitted that there are several Divisions with losses above 20%, and MSEDCL should bring down these high losses. Those Divisions with higher losses should be penalized. The Commission should fix a target of bringing down losses of all these Divisions to 15% within a stipulated time. If the Distribution Losses continue to be higher, the concerned MSEDCL officers in these Divisions should be penalized. In this regard, it is essential that MSEDCL undertake automated meter reading for all Feeders. Aam Admi Party, Pune suggested that the area-wise Distribution Losses should be published.

***MSEDCL's Reply***

- 2.11.10 MSEDCL is making rigorous efforts for improvement in several aspects, including metering and billing processes. It acknowledged that reduction in Distribution Losses will enable reduction in costs and increase revenue, which would benefit consumers.
- 2.11.11 MSEDCL presented the trend of improvement in Distribution Loss from FY 2009-10 to FY 2013-14, as summarised below:

**Table 2: Trend of actual Distribution Loss**

<b>FY 2009-10</b>	<b>FY 2010-11</b>	<b>FY 2011-12</b>	<b>FY 2012-13</b>	<b>FY 2013-14</b>
20.60%	17.28%	16.03%	14.67%	14.00%

2.11.12 Energy Losses occur in the process of distribution of electricity to consumers due to Technical and Commercial Losses. While the Commercial Losses are caused by theft, pilferage, defective meters, and errors in meter reading, the Technical Losses are due to energy dissipated in the conductors and equipment used for transmission, transformation, sub-transmission and distribution of power. The major factors contributing to Technical Losses are large-scale rural electrification through long 11 kV and LT lines, which involve many stages of transformation, and poor quality of equipment used in agricultural pumping in rural areas. Coolers, air-conditioners and industrial loads in urban areas also contribute to Technical Losses.

2.11.13 MSEDCL submitted statistics of the distribution infrastructure maintained by it across Maharashtra as follows:

**Table 3: Distribution Infrastructure in Maharashtra**

<b>Particulars</b>	<b>Value</b>
Sub-Stations (Nos.)	2,815
Capacity of Sub-Stations (MVA)	25,105
LT Line Length (ckt-km)	5,93,549
11 kV Line Length (ckt-km)	2,61,891
33 kV Line Length (ckt-km)	39,360

2.11.14 MSEDCL added that it is serving to the largest geographical area than any comparable State electricity distribution company in the Country. Due to its large geographical spread, its LT line length is also higher than elsewhere. These LT lines are contributing significantly to the Technical Loss. In addition, the LT network is also vulnerable to Commercial Losses. Due to the far-flung rural nature of agriculture consumers across the State, non-availability of quality agencies for meter reading and the tendency on the part of consumers not to keep the metering installations in order makes it very difficult task to take meter readings properly.

2.11.15 MSEDCL submitted that it has exceeded the loss reduction trajectory stipulated by the Commission, and reduced the Distribution Loss from 30.2% in FY 2006-07 to 14% in FY 2013-14. It would continue efforts for further loss reduction. However, loss reduction is a slow process and becomes increasingly difficult as it comes

- down. In view of this, MSEDCL has assumed that the Distribution Loss in FY 2014-15 and FY 2015-16 would be reduced by 0.25% per annum.
- 2.11.16 In its additional submission subsequent to the Public Hearing, MSEDCL reiterated its commitment to correct metering and billing of agriculture consumers, and stated that all efforts will be undertaken in this direction.
- 2.11.17 Further, MSEDCL submitted that losses in a particular Zone or Circle depend on many factors such as the geography of the area, capacity of the distribution system, HT:LT ratio, consumer mix, consumption pattern, etc. Some Circles or Divisions having a higher loss level does not mean all the consumers there are committing thefts or indulging in malpractices. It would be difficult to pass on tariff benefits specifically to consumers in Zones with lower losses, and comparison of Distribution Loss level of different Zones vis-à-vis the State average may not be appropriate. Consumers in areas with higher Distribution Loss are already subjected to higher load shedding than others, and there is no need to change the current practice of determining tariff based on the Distribution Loss of MSEDCL as a whole.
- 2.11.18 MSEDCL has been publishing the list of top 100 Feeders with highest Distribution and Commercial Losses. However, there are admittedly instances of absurd loss figures on some Feeders due to errors on account as shifting of load from one Feeder to another, change in consumer mapping because of changes/ creation of infrastructure and mismatch in the period considered for billing and input cycles. Analysis of such absurd data is carried out so as to rectify the problems for proper energy accounting. MSEDCL also publishes information on Feeders with such absurd losses to ensure transparency. Such information is used for system improvement and to ensure accurate energy accounting to the extent possible, and MSEDCL endeavours to make the latest information available on its website.

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

- 2.11.19 The Commission's analysis and rulings on the issue of Distribution Loss to be considered for FY 2013-14 to FY 2015-16 is elaborated in Chapter 3 of this Order.

## **2.12 Revenue Gap**

### ***Objections / Suggestions***

- 2.12.1 R.L Steels contended that MSEDCL has not performed in an efficient and economical manner, as a result of which the Revenue Gap has increased significantly since FY 2003-04. In FY 2003-04, the Revenue Gap was around Rs 1,500 Crore for the erstwhile integrated MSEB, while it has become Rs 4,717 Crore now for the Distribution Business alone.
- 2.12.2 Vidyut Urja Equipments Pvt. Ltd., Pune submitted that MSEDCL has considered Fuel Adjustment Charge (FAC) of Rs 3,003 Crore towards power purchase

- expense, but has not considered corresponding FAC revenue in the estimated Revenue, thereby underestimating the latter.
- 2.12.3 Shri. Pramod Khandagale, MVGS submitted that the total profit of MSPGCL and the Maharashtra State Electricity Transmission Co. Ltd. (MSETCL) together is Rs. 3,888 Crore. As MSPGCL, MSETCL and MSEDCL are all Government Companies, this profit should be used to compensate the deficit of MSEDCL instead of burdening consumers further.
- 2.12.4 Shri Kiran Paturkar, Federation of Industries Association Vidarbha submitted that, in the Regulatory Format F 14.1 (Revenue at the existing tariff for FY 2014-15), MSEDCL has not included the FAC amount of Rs.3,003 Crore. This amount of Rs. 3,003 Crore should be deducted from the Revenue Gap in FY 2014-15.
- 2.12.5 Central Railways submitted that the ARR for FY 2015-16 should be reduced by the amount of subsidy provided to MSEDCL. This would reduce the ARR, and the end benefit may be passed on to consumers.
- 2.12.6 Shri Dilip Bhattalwar submitted that MSEDCL's request for recovering the Gap within the next 12 months should be rejected as it would give a tariff shock to consumers. He pointed out that not submitting ARR Petitions on time has resulted in this huge Revenue Gap, which should not be passed on to consumers.
- 2.12.7 Prayas submitted that the creation of a Regulatory Asset may avert tariff shock in the near future, but will not help in addressing MSEDCL's financial position, as can be seen from the situation in States like Tamil Nadu, Uttar Pradesh and Rajasthan whose distribution companies are burdened with huge financial losses. The accumulated losses and carrying cost will only increase with every year. The net Revenue Gap estimated by MSEDCL is 4 times the State Budget's Revenue Gap in 2013-14, and is as high as 1.3% of the State Gross Domestic Product. Prayas Energy Group added that GoM has committed to provide about Rs. 5,500 Crore as subsidy in its Budget for FY 2015-16. Additional support needed to meet MSEDCL's Revenue Gap would be almost 2/3rd of the fiscal deficit of Maharashtra in 2013-14.

***MSEDCL's Reply***

- 2.12.8 MSEDCL submitted the summary of Revenue Gap, after considering the impact of previous period adjustments for FY 2015-16, as under:

**Table 4: Revenue Gap, as submitted by MSEDCL (Rs. Crore)**

Sr. No.	Particulars	FY 2015-16 (Projected)	% hike
1	FY 2013-14	(261)	-0.4%
2	FY 2014-15	3,442	5.8%
3	FY 2015-16	(316)	-0.5%
4	Balance Gap in Final True Up for FY 11-12 and FY 12-13	1,639	2.8%
5	Impact of ATE Order on Capex Related Expenses	54	0.1%

Sr. No.	Particulars	FY 2015-16 (Projected)	% hike
6	Refund as per MERC Order (Case No.105 of 2013)	83	0.1%
7	Income Tax disallowed in Case No. 38 of 2014	77	0.1%
8	<b>Total Revenue Gap of MSEDCL</b>	<b>4,717</b>	<b>7.9%</b>

2.12.9 The total Revenue Gap is Rs. 4,717 Crore, after considering the Gaps for FY 2013-14 to FY 2015-16, the balance Gap in the final True Up for FY 2011-12 and FY 2012-13, impact of Appellate Tribunal for Electricity (ATE)'s Order on capex-related expenses, refund as per the Commission's Order in Case No.105 of 2013, and Income Tax disallowed in Case No. 38 of 2014. The recovery of this Revenue Gap would amount to an average increase of about 8% in the existing tariff. Out of this, around 3% is due to the balance Gap in the final True Up for FY 2011-12 and FY 2012-13, which the Commission approved in its Order dated 11 June, 2014 but for which recovery was not allowed. Thus, for a period of three years, MSEDCL has proposed an increase of around 5% hike, excluding the balance Gap mentioned above.

2.12.10 MSEDCL has proposed recovery of this Revenue Gap over a period of 12 months in FY 2015-16.

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

2.12.11 In this Order, the Commission has analysed each head of expense and revenue as claimed by MSEDCL and its proposed treatment, and accordingly determined the Revenue Gap/Surplus over the Control Period in accordance with the MYT Regulations. The Commission's analysis of the Revenue Gap/(Surplus) is set out in Chapters 3 and 4.

### **2.13 Increase in Tariff**

#### ***Objections / Suggestions***

2.13.1 Shri. Sidharth Verma (an authorised Consumer Representative) contended that the proposed increase in tariff is based on wrong premises. He submitted that the Petition shows deficit of Rs. 4,717 Crore. However, considering the impact of Interim Charges, Generation Charges and Transmission Charges, the deficit amounts to around Rs. 10,625 Crore. As per the Tariff Policy, the Commission should not entertain any Petition, which gives a tariff shock (variation of +/- 20% in tariff) to its consumers. The present Petition reflects in average increase of 35% for domestic consumers and hence this proposal cannot be entertained.

2.13.2 Shri Rajesh Ankushrao Tope submitted that the proposed increase in Industrial tariff would severely affect industries such as Steel Industry, Spinning Industries and would result in to situation of closing down of such Industries in the State. Hence, he urged for reduction of Industrial tariff. He pointed out that the Industrial tariff within Maharashtra is around 1.5 times of that prevalent in other States.



- 2.13.3 The Lagoon Resort submitted that the tariff rates have increased by as much as 35%, and the proposed increase for FY 2014-15 and FY 2015-16 will further add to the burden of consumers.
- 2.13.4 Aam Aadmi Party, Pune and Shri Dileep B. Parulekar from Taloja Manufacturers' Association pointed out that MSEDCL had not proposed any tariff hike for Agriculture consumers, but had done so for all others.
- 2.13.5 MASSIA, Cosmo Films and Frigorifico Allana Pvt. Ltd. submitted that the electricity tariff for industries in Maharashtra is much higher than in other States, which makes them unable to compete with producers from other parts of the country. The Industrial tariff is around 1.5 times higher than in other States.
- 2.13.6 Bharat Forge submitted that the percentage increase in tariff proposed for HT Industries is very high. Many industries will close down or shift to other States where the tariffs are much lower.
- 2.13.7 Garware Polyester Ltd., Aurangabad strongly opposed the proposed increase in tariff. In the recent past, tariff has been increased thrice (in Case Nos. 19 of 2012, 95 of 2013 and 38 of 2014), resulting in a tremendous financial burden on industries.
- 2.13.8 Shri Hemant Kapadia submitted that the tariffs determined in the last Tariff Order dated 16 August, 2012 is still applicable. However, since the tariff rates of November, 2014, which are 20-25% higher, have been considered for computation of Revenue Gap by MSEDCL, the computation of Revenue Gap is wrong and hence, the final portion of the Petition needs to be revised. He also suggested that the slabs for the Residential category not be changed as envisaged, as the proposed increase for that category would amount to 27% as compared to the existing slabs. The impact of MSEDCL's proposal on residential consumers below 300 units is that they will have to pay more than the Cost of Supply.
- 2.13.9 Can-Pack India Pvt. Ltd.- Glass Bottles Branch submitted that, in proposing the tariff increase, MSEDCL has not followed the MYT Regulations, and is violating the principal object of the Tariff Policy i.e., to ensure availability of electricity to consumers at reasonable rates.
- 2.13.10 Thane Small Scale Industries Association submitted that the electricity rates for Small Scale Industries should be reduced. MSEDCL has proposed a 16% hike in Fixed Charges and, in case of HT non-express Feeder consumers, the increase proposed is 4%. The proposed reduction of 1% in the rate for LT consumers is negligible. On average, the tariff for industries will be between paise 861 and 955 per unit, which is very high and needs to be reduced.
- 2.13.11 Captive Power Producers' Association urged that prudence check of all expenses be carried out, and any increase in expenses should be rejected so that the ARR is kept at a minimum. MSEDCL should bring Industrial tariffs on par with neighbouring States.

- 2.13.12 Shri. Shreekar Balwant Soman, VCCI, Akola submitted that the claim for increase in tariff is not adequately supported with documents. Akhil Bhartiya Grahak Panchayat suggested that there should be new tariff slabs for consumers, and stated that the proposed increase in Fixed Charges by 15-25% is not acceptable. Shri B S Khandare suggested that tariffs should not be increased every year, but be stable over at least 3 years.
- 2.13.13 Shri Pramod Khandagale, MGVS, Buldhana submitted that MSEDCL has considered four components in its ARR, namely, IC (Interim Charge), GC (Generation Charge)-I, GC-II and TC (Transmission Charge). Out of these, IC of Rs. 5022 Crore and GC-I of Rs. 886 Crore were allowed to be recovered until January, 2015. However, MSEDCL has assumed continued recovery of these charges through FY 2015-16. Hence, the total increase through the proposed ARR far exceeds Rs 4717 Crore, as claimed by MSEDCL. In fact, the increase amounts to 20%, which constitutes a 'tariff shock'. Hence, MSEDCL's tariff Petition should be rejected.
- 2.13.14 Shri Kiran Paturkar of Federation of Industries Associations, Vidarbha suggested that there should be a concessional tariff for the backward Vidarbha region. MIDC Industrial Association, Amravati submitted that 80% of the State's electricity is produced in Vidarbha, but only 7.5% out of this is used by industries in Vidarbha, with very low Transmission Losses. Industries in Vidarbha should get electricity at Rs.5 per unit, and the tariff should be stable for at least 18 to 24 months.
- 2.13.15 Akhil Bhartiya Grahak Panchayat submitted that MSEDCL is taking undue advantage of its monopoly position, and urged that no tariff hike should be allowed at this stage.
- 2.13.16 Shri Avinash Prabhune and others contended that, even though MSEDCL's tariff revision proposal is for Rs.4717 Crore, the actual impact on consumers will be Rs.10625 Crore, with a 20% hike in tariffs. This increase should not be allowed, as tariff rates are already high in Maharashtra as compared to neighbouring States.
- 2.13.17 Shri Ashish Chandrana suggested maintaining tariffs at the level of the last Tariff Order and continuation of all the incentives, for the sake of the development and survival of industries in Maharashtra. He suggested that there be a separate tariff for consumers with Contract Demand of 1 MW and above.
- 2.13.18 Maharashtra State Electricity Workers Federation submitted that proposed tariff increase should be allowed for the following reasons:
- (a) To manage growing pressure to maintain and expand a huge distribution network, MSEDCL needs financial support
  - (b) Capex is required for providing pre-paid electronic meters
  - (c) Opex is required for payment of expenses to an increasing number of employees for better service at sub-Divisional offices

(d) Power purchase cost has increased due to additional purchase for reducing load shedding

- 2.13.19 Prayas submitted that there has already been a significant increase in tariffs on account of levy of AEC, IC, GC and TC and MSEDCL has proposed further increase in tariffs which is unsustainable. High tariffs would force more sales migration through Open Access (OA), thereby compounding MSEDCL's existing problems.
- 2.13.20 Prayas pointed out that repeated True Ups have taken place in the same financial years, and the Order dated 11 June 2014 in which carrying cost was allowed on deferred recovery of Rs. 1,051 Crore, which was calculated considering amounts pertaining to Orders from 2008 onwards. Costs arising from compensatory tariffs to private Generators supplying to MSEDCL, if allowed, would impose an additional burden of Rs. 2050 Crore per year on MSEDCL consumers.
- 2.13.21 Prayas submitted that, since January, 2014, revenue support of Rs. 606 Crore per month was given to MSEDCL by GoM, in addition to the annual revenue subsidy of around Rs. 4,432 Crore given for Agriculture and Powerloom consumers. This revenue support cushioned the tariff increase imposed by the Commission's Orders in Case Nos. 95 of 2013 and 38 of 2014. This annual revenue subsidy of around Rs. 7,200 Crore effectively ensured that consumers did not have to pay for the tariff increase approved by the Commission since August, 2012. However, this additional revenue support has now been withdrawn. Hence, the real impact in terms of tariff increase that will be felt by consumers on account of the proposed revision is to the extent of 27%, and not 8% as is being projected.

### ***MSEDCL's Reply***

#### **General justification for Tariff increase**

- 2.13.22 The Revenue Gap projected in the Petition needs to be recovered to maintain MSEDCL's viability. The tariff increase required to meet the estimated Revenue Gap in FY 2015-16 is mainly attributable to increase in power purchase costs, including Transmission cost and O&M Costs.
- 2.13.23 MSEDCL submitted the following Table providing details of major components of its total expenses:

**Table 5: Major Expenses of MSEDCL**

PARTICULARS	FY 2013-14		FY 2014-15		FY 2015-16	
	Actual		Projected		Projected	
	Rs. Crs	%	Rs. Crs	%	Rs. Crs	%
Power Purchase Cost, including Transmission Charges	39,526	78%	46,671	78%	51,405	81%
O&M Expenses	5,320	10%	6,289	11%	7,123	11%
Other Expenditure, including Depreciation, Interest, Etc.	5,952	12%	6,840	11%	5,164	8%

PARTICULARS	FY 2013-14		FY 2014-15		FY 2015-16	
	Actual		Projected		Projected	
	Rs. Crs	%	Rs. Crs	%	Rs. Crs	%
<b>Total</b>	<b>50,798</b>	<b>100%</b>	<b>59,800</b>	<b>100%</b>	<b>63,692</b>	<b>100%</b>

2.13.24 Power purchase cost, including Transmission cost, constitutes around 80% of the Revenue Requirement, over which MSEDCL has no control. Due to variations in market-driven fuel costs, the power purchase cost has increased by around 30%. The total cost has increased from Rs. 50,798 Crore in FY 2013-14 to Rs. 63,692 Crore in FY 2015-16. Thus, power purchase costs and transmission costs have increased by about Rs. 12,894 Crore (by about 25%).

2.13.25 Consequently, MSEDCL is compelled to propose increase in tariffs in order to serve its consumers better and supply them reliable and quality power.

#### **Incorrect presentation of Tariff increase**

2.13.26 Regulation 8.4 of the MYT Regulations provides for forecast of expected revenue from tariff and charges. Accordingly, MSEDCL has projected the revenue at the tariff prevailing as on the date of filing the MYT Petition. In its Interim Order dated 3 March, 2014 in Case No. 38 of 2014, the Commission has ruled that the Interim Charge shall be in force from the energy bills issued from 1 March, 2014 to 28 February, 2015. The Commission also ruled that AEC-2, as proposed by MSEDCL, will continue to be levied as per the Interim Order.

2.13.27 Therefore, MSEDCL has shown the prevailing tariff (considering the additional charges pursuant to the Interim Order dated 3 March, 2014) as on the date of filing the MYT Petition, and compared the proposed tariff with it.

#### **Justification for no Tariff increase for Agricultural consumers**

2.13.28 Historically, and rightly so, Agriculture consumers have had lower subsidised tariffs considering their capacity to pay, as envisaged in the Tariff Policy. The Tariff Policy also envisages that a higher level of subsidy can be considered to support poorer farmers where the adverse groundwater table condition requires larger quantum of electricity for irrigation purposes. Further, agricultural produce has a significant share in the State GDP. Therefore, as a social obligation, the State Government also provides subsidy to Agriculture consumers so as to keep the electricity tariff low.

2.13.29 Considering the present tariffs, instances of drought in some places and untimely rains/hailstorms in many places, and the difficulties and hardships faced by the Agriculture consumers, MSEDCL has proposed no increase in their tariffs.

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

2.13.30 The Commission has conducted a detailed analysis of MSEDCL's proposal for power purchase and other costs before determining the tariff revision in this Order.

Accordingly, the Commission has approved an overall reduction of 5.72% in the tariff, as compared to that prevailing at the time of filing of the Petition (or a reduction of 2.44% as compared to the tariff at the beginning of FY 2015-16 (i.e. April, 2015)), as against a tariff increase of 8% proposed by MSEDCL (as compared to that prevailing when the revised Petition was filed (February, 2015).

- 2.13.31 The Tariff philosophy and tariff design-related aspects have been covered in detail in Chapter 6 of this Order.

## **2.14 Average Cost of Supply and Cross-Subsidy Surcharge**

### ***Objections / Suggestions***

- 2.14.1 Vidyut Urja Equipments Pvt. Ltd., Pune pointed out that tariff of consumers depends on the Average Cost of Supply (ACoS). The ARR of MSEDCL has increased by 93% in six years from FY 2010-11 to FY 2015-16, whereas sales increased only by 30.91%.
- 2.14.2 Shri Lokanayak Jaiprakash Narayan Shetkari Sahakari Soot Girni Ltd. submitted that the ACoS and ABR for industrial consumers in Maharashtra are very high compared to neighbouring States.
- 2.14.3 CPPA asked that the tariff principles be implemented based on category-wise Cost of Supply for each category of consumers. CPPA, Owens Corning India Pvt. Ltd. and Technova Ltd. objected to the unjustified increase in the Cross-Subsidy Surcharge (CSS) to OA consumers, and requested the Commission to strongly promote OA.
- 2.14.4 Bharat Forge highlighted that the percentage increase proposed in CSS for EHV consumers, 33 KV consumers and 22/11 KV consumers is very high, and contended that the CSS increase for FY 2014-15 cannot be made applicable retrospectively.
- 2.14.5 Tata Motors submitted that the proposed OA charges are 56% of the proposed tariff rate for the HT-I category and 67% of ACoS for FY 2014-15, thus killing competition. The Commission should revalidate the working of CSS before approving the Petition, for the survival of OA business in Maharashtra.
- 2.14.6 Shri Avinash Prabhune submitted that CSS should be disallowed as it prevents OA and creates a monopoly.
- 2.14.7 Shri Jayant Deo referred to the formula at Clause 8.5.1 of the Tariff Policy, and also pointed out that the Commission, in para 118 of its Order in Case No. 50 of 2012, expressed its inability to work out the CSS in the absence of electricity tariff determined for OA consumers as per the proviso to Section 86 (1)(a) of the EA, 2003. The last line below the formula reads as follows:

*“The Cross Subsidy Surcharge should be brought down progressively and as far as possible, at a linear rate to a maximum of 20% of its opening level by the year 2010-11.”*

- 2.14.8 In this context, Shri Deo submitted that CSS is worked out on the basis of progressive reduction in the opening level, and this level is to be measured in terms of the ACoS to retail consumers. Hence, exclusion of bulk consumers from tariff determination does not create any issue for CSS computation. He suggested that the Commission use the recommendations of the OA Committee referred to in paras. 139 and 140 of its Order in Case No. 50 of 2012, and encourage competition and develop the market as required under Section 66 of EA, 2003.
- 2.14.9 Galaxy Surfactants Ltd. and Rexam HTW Beverage Can (India) Ltd. objected to the unjustified increase in CSS for OA consumers.
- 2.14.10 Shri Pratap Hogade (MVGS) and others submitted that the revised CSS rates are too high, due to which OA would become a costly affair and consumers would not be able to opt for it. Naik Oceanik Exports Pvt. Ltd. submitted that there should be lower cross-subsidisation between Industrial and Agriculture tariffs to ensure a level playing field and foster industrial growth in Maharashtra.
- 2.14.11 Indian Railways submitted that it is already bearing one of the highest ABR to ACoS ratios among consumer categories, which means that it is bearing a heavy cross-subsidy for other consumers. To add to this, a 7% increase in cross-subsidy to be borne by Railways has been proposed. However, the increase proposed for other categories has been kept lower. The Commission may decrease the proposed tariff for Railways, and fix CSS within the range of  $\pm 20\%$  of ACoS.
- 2.14.12 Federation of Industries Association, Vidarbha submitted that, as per the Tariff Policy cross subsidies have to be reduced to the level of  $\pm 20\%$  by the end of March, 2010. However, that has not been achieved. MSEDCL is discouraging OA by increasing Wheeling Charges and CSS substantially. SAIL, Chandrapur, CREDAI, Nagpur and others also submitted that, while designing tariffs for each category, the Cross-Subsidy should be brought within  $\pm 20\%$  of the ACoS.
- 2.14.13 Shopping Centres Association of India (SCAI) submitted that consumers opting for OA by procuring power from the open market were already required to pay very high CSS to MSEDCL on the electricity purchased, which ranged from Rs. 3.66 / unit to Rs. 8.22 / unit. However, MSEDCL has proposed further increase in the CSS. CSS should be reduced as per the pre-defined cross-subsidy reduction plan by the Commission.

#### ***MSEDCL's Reply***

##### **a) Cross-Subsidy reduction**

- 2.14.14 The EA, 2003 provides that cross subsidies be progressively reduced. As per the Tariff Policy, it is expected that the tariff should progressively reflect the efficient and prudent ACoS of electricity.

- 2.14.15 The present status of finalizing the road-map is in the initial stage. The reduction of cross-subsidy in tariffs through a transparent road-map can be taken up only after due consultative process involving all stakeholders, including GoM. The cross-subsidy is directly linked with the ARR and is directly impacted by various uncontrollable factors. All these issues need to be looked into while deciding the tariffs for various categories.
- 2.14.16 In its Petition, MSEDCL has stated that, considering that the Commission is still to finalize the road-map and its philosophy on cross-subsidy, MSEDCL has not proposed a road-map for cross-subsidy reduction. MSEDCL therefore mentioned that after issuance of cross-subsidy road-map by the Commission, MSEDCL shall submit the CSS reduction road-map.
- 2.14.17 Subsequent to the Public Hearing, MSEDCL added that the Commission had initiated the process of “Preparation of Road-map for progressive reduction of cross-subsidy”. A number of representations were received by the Commission from electricity consumers and Distribution Licensees. The Commission also discussed the progress of the work in several State Advisory Committee (SAC) meetings. The report was forwarded to GoM on 21 June, 2012. The Commission is still to finalize the road-map and its philosophy on cross-subsidy. After issue of the road-map by the Commission, MSEDCL would submit its CSS reduction plan.

**b) Cross-Subsidy Surcharge**

- 2.14.18 MSEDCL has sought recovery of the Revenue Gap and proposed revised Energy Charges. Accordingly, the ABR of existing consumers would change. The change in ABR further results in change in CSS being paid/ payable by the existing OA consumers. Since section 42 of EA, 2003 also states that the surcharge needs to be utilized to meet the requirements of current level of cross-subsidy within the area of supply of the Distribution Licensee, it is necessary to re-determine the CSS to maintain the proposed level of cross-subsidy, which would be paid by consumers availing OA. MSEDCL has proposed the CSS accordingly.
- 2.14.19 As and when it is determined by the Commission, CSS is generally made applicable prospectively. Vide its Order in Case No. 38 of 2014, the Commission allowed certain charges which resulted in increase in the tariff of MSEDCL consumers during FY 2014-15. Therefore, the need to re-determine the CSS arose due to the change in ABR i.e., the “T” component of the CSS formula. Accordingly, a proposal for re-determination of CSS was submitted to the Commission in Case No. 169 of 2014. The CSS sought was to be made applicable to those consumers who were availing OA during FY 2014-15. However, subsequently, MSEDCL withdrew the Petition, with liberty to file additional submissions in the ongoing proceedings of its MYT Petition.

- 2.14.20 As stipulated in the MERC (Distribution OA) Regulations, the CSS is based on the formula in the Tariff Policy. Accordingly, the consumers who opted for OA in FY 2014-15 need to be charged for compensation of the level of cross-subsidy which prevailed during FY 2014-15 by virtue of the Order in Case No. 38 of 2014 and avoid burdening other consumers. Therefore, MSEDCL has requested the Commission to approve the CSS for FY 2014-15, and apply it from April 1, 2014.

***Commission's Ruling***

- 2.14.21 The Commission has undertaken a detailed analysis of MSEDCL's proposed power purchase plan and cost, along with scrutiny and analysis of other components of the ARR. The Commission views and analysis are set out in Chapter 3 of this Order.
- 2.14.22 The Commission is conscious of the need to gradually reduce cross-subsidy. The GoM had issued certain directions in this regard under Section 108 of the EA, 2003. The Commission submitted a draft report to the GoM, which proposes a road-map for reducing cross subsidies in Maharashtra. At present, the report is under consideration of the GoM. However, in the present Order, the Commission has effected reduction in cross-subsidy to some extent, as will be seen in the Table on cross-subsidy at the existing and proposed tariffs in the Section on Tariff Philosophy in Chapter 6 of this Order. As regards CSS determination, the Commission has extensively dealt with it in Chapter 6.

**2.15 Open Access and Wheeling Charges**

***Objections / Suggestions***

- 2.15.1 Sanjay Techno Product Pvt. Ltd. suggested that a comprehensive action plan should be prepared to achieve healthy competition in electricity tariffs and allow the OA for consumers upto 100 kW.
- 2.15.2 Federation of Industries Association Vidarbha submitted that, by increasing Wheeling Charges substantially as proposed, OA will be discouraged.
- 2.15.3 Bharat Forge submitted that a 110% increase has been proposed in Wheeling Charges for FY 2014-15, and a 100% increase in FY 2015-16. The projection has been done on the basis of the estimated value of Gross Fixed Assets (GFA), and MSEDCL has not maintained costs of assets voltage-wise. Further, as FY 2014-15 is almost over, the percentage hike in cross-subsidy for EHV consumers, 33 KV consumers and 22/11 KV consumers is very high, and the increase in CSS for FY 2014-15 is proposed to be made applicable retrospectively. MSEDCL has not worked out the ABR for the EHV category. Further, a separate CCS rate is proposed for EHV consumers, which is much higher than for HT/ LT consumers. A steep increase in CSS has been proposed for EHV consumers on Express Feeders. Moreover, MSEDCL has sought Additional Surcharge to be levied on OA consumers.



- 2.15.4 Tata Motors objected to the proposal to introduce Additional Surcharge on OA consumer, viz. Industrial and Commercial category consumers. Such unjustified charge will kill OA in the State.
- 2.15.5 Mahratta Chamber of Commerce, Industries & Agriculture, Pune submitted that a key objective of the EA, 2003 is competitive supply through market forces, for which purpose the State Commissions have been entrusted with the responsibility to develop the market in a phased manner. Referring to Sections 42, 62(1)(d) and 86(1) (a), the Chamber submitted that the tariff for all 1 MW and above consumers, who may be categorized as bulk consumers should not be determined by Commission. Therefore, the power requirements of this category of consumers should not be considered in the ARR. Consequently, the cost of power procured under the Merit Order for retail consumers will reduce, thereby reducing the cross-subsidy. It added that MSEDCL has proposed a significant increase in Wheeling Charges between 100% to 110%. While doing so, MSEDCL has relied on estimated values rather than analysing the actual data.
- 2.15.6 Prayas suggested that there should be provisions for increasing the viability of RE OA transactions. Consumers should have the choice of obtaining supply through OA with a reduced CSS, or through rooftop systems in a net metering framework. It pointed out that the recent Electricity (Amendment) Bill, 2014 has mandated migration of all 1 MW and above cross-subsiding consumers away from MSEDCL, and highlighted the possibility of shifting of high-paying consumers with a Connected Load of 1 MW and above to the new Supply Licensees envisaged in the proposed amendments.
- 2.15.7 During Public Hearing at Nasik, Shri Vijay Naval Patil submitted that in order to promote renewable energy in the State, concessional wheeling and open access charges for wind power projects and solar energy projects in the state should be provided. Further, rooftop solar PV installations on the rooftops of Schools, Educational Institutes should be encouraged.

***MSEDCL's Reply***

**a) Additional Surcharge**

- 2.15.8 MSEDCL has implemented Intra-State Availability Based Tariff (ABT) framework in Maharashtra since 1 August, 2011, and the Maharashtra State Load Despatch Centre (MSLDC) and Distribution Licensees are granting approvals / consent to OA consumers as per the Distribution OA Regulations. Accordingly, consumers are now buying a considerable quantum of power under OA. On the other hand, MSEDCL has tied up large quantum of power considering the overall growth in its area. This results in stranded generation capacity and under-recovery of Fixed Costs by MSEDCL. Hence, there is a need for determination of Additional Surcharge payable by OA consumers availing power under OA in order to compensate MSEDCL for such stranded cost.

**b) Open Access permissions and charges**

- 2.15.9 MSEDCL submitted that it has been allowing OA to all eligible consumers and levying charges as per the provisions of the EA, 2003 and the relevant Regulations.

***Commission's Ruling***

- 2.15.10 The Commission has dealt with the issues relating to OA charges as well as the retail tariff applicable to eligible OA consumers in Chapter 6 of this Order. While the option of OA available to eligible consumers is intended to encourage competition and choice, exercising such choice would depend upon several factors, including the retail tariff of the Distribution Licensee and applicable OA charges. In Chapter 6, the Commission has dealt with the determination of Wheeling Charges and CSS, which have an important bearing on OA transactions. It has also revised the retail tariff for the Industrial and Commercial categories, which predominantly include the eligible OA consumers. The Commission believes that the interplay of these and other factors would determine the evolution of OA transactions in the State.

**2.16 Tariff for different Consumer Categories**

***Objections / Suggestions***

- 2.16.1 **Public Water Works (PWW):** Shri Pratap Hogade (MVGS) and Shri Shakeel Ansari (MECA) suggested that the PWW and Sewage Treatment Plant operations in Co-operative Industrial Estates, Industrial Parks and Textile Parks should be applied the tariff for LT-III category, as in Maharashtra Industrial Development Corporation (MIDC) areas.
- 2.16.2 Shri Ashish Chandrana submitted that electricity connections to Housing Societies for common amenities like tubewells, lighting and lifts should be re-classified under PWW as most of the consumption is for the purpose of lifting of water for the Society members.
- 2.16.3 **Separate category for Powerlooms:** Shri John Pareira, Veej Grahak Sanghatana, Shri Faizan Azmi of Maharashtra State Powerloom Federation, Maharashtra Pradesh Janata Dal, Nirbhay Jan Sanstha, Ambad Industries and Manufacturer's Association, Shri Vijay Sadashiv Mohrir and the Malegaon Powerloom Action Committee and others submitted that Maharashtra has more than 50% of the total number of Powerlooms in India. Therefore, the Powerloom industry should be made a separate consumer category with a discounted tariff.
- 2.16.4 Shri. Suresh Halvankar, Shri. Chhagan Bhujbal, Shri. Anil Gote, Shri. Subhash Deshmukh, Shri. Shantaram More, Shri. Mahesh Chowgule, Shri Rupesh Mhatre, Shri. Asif Shaikh Rasheed Shaikh, Shri Anil Babar, Smt. Praniti Shinde and Dr. Sujit Minchekar, (all Members of the Maharashtra Legislature) argued for a separate category for Powerlooms as a 'Cottage Industry'. They submitted that, out

of 24 lakh Powerlooms in India, nearly 12 lakh Powerlooms are in Maharashtra, and provide direct employment to nearly 3 million people personnel. A total population of around 12 million is dependent on the Powerloom business. He pointed out that there was a separate tariff category for Powerlooms in Maharashtra until 2007, but it was merged with the Industrial category thereafter. He also cited the examples of Chhattisgarh and Andhra Pradesh, where a separate category for Powerlooms still exists. At the Public Hearing at Pune, Shri. Anil Babar, MLA, reiterated the above submissions to emphasize that, Powerlooms should be treated as separate category as a cottage industry. At the Public Hearing, Shri Pratap Hogade, on behalf of Shri Suresh Halvankar, Member of the Legislature, also argued in favour of creating separate category for Powerlooms in Maharashtra.

- 2.16.5 Shri Sajid Hussain Vakil Ahmad Ansari suggested a new tariff category of 'Plain Powerloom Industry', catering to a large section of the lower investment Powerloom operations. In the automatic Powerloom industry, the profit margin is higher. He added that Govt. subsidy is the lifeline for the 'plain' Powerloom industry. The subsidy for the automatic Powerloom industry may be withdrawn, and the subsidy for the 'plain' Powerloom industry should be increased correspondingly.
- 2.16.6 **Service Industry:** Envirocare Labs Pvt. Ltd. suggested that the tariff should be rationalized for service industries registered under the Micro, Small and Medium Enterprises (MSME) Act, based on their activities. This is necessary for those MSME units who play a crucial supporting role for manufacturing and Research and Development (R&D) activities. In view of this, such service industries may be treated on par with manufacturing units for applicability of tariff under the LT-V Industrial category instead of LT-II Commercial category. It added that the term "industry" is not defined in the EA, 2003. Further, even though the Commission uses the term in its consumer categorisation, it has not defined it either. Therefore, the definition of 'industry' in the Industrial Disputes Act should be referred to. That definition also supports the contention that Testing Laboratories and R&D Units meet the definition of 'industry' in letter and spirit. Hence, the LT V-Industrial Tariff may be made applicable to them, rather than arbitrarily charging such Units at the exorbitant tariff under the LT II Commercial Category. Further, the LT-V Industrial Tariff should be applied to registered MSME Service Industries.
- 2.16.7 **Slabs within Residential Category:** Shri Ashish Chandrana submitted that MSEDCL's proposal for changing the existing slab structure for Residential consumers, and applying the increased Residential tariff to consumers of all categories who are consuming upto 3600 units per annum, needs to be rejected. The existing arrangement should be continued, as small business consumers will not be able pay their bills on account of higher tariff.

- 2.16.8 Shri Avinash Prabhune submitted that tariffs for the 0-300 units Residential consumer category should not be increased, whereas Residential consumers above 500 units should be charged without slab benefits at higher rates. The proposed bifurcation in slabs should not be allowed.
- 2.16.9 Urja Sahayog submitted that, in the proposed tariff structure, a domestic consumer consuming 500 units and above will have to pay nearly double the actual cost of energy. MSEDCL's argument that such consumers have paying capacity is not convincing. The financial status of the consumer has no relevance to the supply of electricity. Residential use has no profit element and, therefore, the extra charge is improper.
- 2.16.10 Green Earth Social Development Consulting Pvt. Ltd. submitted that the modified slab structure proposed by MSEDCL will only confuse domestic consumers. The low-end consumers who use up to 100 units do have high-end appliances also, so splitting their slab into two (0-75 and 76-125 units) will create dissatisfaction among them. It may also lead to meter tampering in order to avoid higher rates for a few units. It also objected to the basis of the proposed introduction of the 0-75 slab, when there is already a separate slab of 0-30 units for the poorest (BPL) consumers. There are 10,573,396 consumers in the 0-100 units slab, i.e. around 67% of the total domestic consumers. In the existing slab of 101-300 units, the consumer was charged the rate of the previous slab for the first 100 units of consumption, but in the proposed slab the consumer will have an altogether different and higher tariff slab even if he consumes a single unit more than the proposed lower slab of 0-125 units .
- 2.16.11 Ansari, Momin, Julaha Powerloom Conference suggested that the 0-400 unit consumption residential consumers should be charged Rs. 3.36 per unit.
- 2.16.12 Shri Yusuf Mohd. Shaikh suggested that the proposed LT domestic category slab of 0-125 units be charged at the existing Fixed Charges and Energy Charges for the 0-100 units slab. Hence, the limit of 0-100 units per month should be increased to 0-125 units. No tariff hike for this category should be allowed.
- 2.16.13 **Govt. Educational Institutions/Hospitals:** Shri Ashish Chandrana opposed special treatment for Government schools, hospitals etc. He submitted that the Government should not be a beneficiary of the cross-subsidy collected from the common man to be provided electricity at cheaper rates.
- 2.16.14 Akhil Bharatiya Grahak Panchayat, Akola submitted that electricity at Government educational institutions and hospitals is ultimately used for the common man, and hence MSEDCL's proposal to create a separate category and to apply separate tariff for such institutions is not proper.
- 2.16.15 Shri Suhas Khandekar favoured a lower tariff for Government Hospitals (as a new category). He also supported a lower tariff for Residential/ Domestic consumers consuming less than 300 units per month, and introduction of new slabs in the Residential tariff category. During Public Hearing at Nasik, Shri Vijay Naval Patil

- pointed out that over 40% of the Educational Institutes in the State are Government owned. He argued in favour of lower tariff for Government Educational Institutes.
- 2.16.16 **Mobile Towers:** Shri Nilesh Ghope and Shri Rahul Kadu submitted that Commercial tariff should be applied to Mobile Towers.
- 2.16.17 Bharati Airtel Ltd. submitted that the Telecom sector has been notified as an Infrastructure sector vide Government of India's Notification 8 of 2012. Other States, namely Andhra Pradesh and Rajasthan, have covered telecom loads under the Industrial category as per their Information Technology (IT)/ IT-enabled Services (ITES) Policies. Therefore, they ought to be classified as an industry as distinguished from entities performing purely commercial activities.
- 2.16.18 Vodafone Cellular Ltd. and Idea Cellular Ltd., in their letters dated 27 and 22 May, 2015, respectively, objected to MSEDCL's proposal for reclassification of Mobile Towers from the Industrial category to the Commercial category. Such reclassification was sought by MSEDCL in its earlier Petition in Case No. 19 of 2012, and the Commission had allowed such reclassification in its Tariff Order. They stated that the Order was challenged before ATE. The ATE granted liberty to MSEDCL to file a fresh Petition, and the Commission was directed to pass an appropriate Order after hearing all the concerned parties. The two objectors have now submitted that they would be adversely affected by the reclassification proposed by MSEDCL and, in accordance with the ATE Judgment, sought an opportunity to file their objections and to fix a date for hearing them.
- 2.16.19 **Creation of new LT Categories:** CREDAI, Nagpur submitted that there was no need to create the new categories LT-XI and LT-XII. The old billing system should be continued for LT category consumers. They objected to too many categories being proposed with different rates in the LT as well as the in HT categories, and urged that they be reduced.
- Shri Dilip Bhattalwar suggested that the consumer categories and slabs should be minimized. All categories should be classified into 12 broad categories to remove ambiguities and the consequent corruption in exercise of discretion by MSEDCL officers.
- 2.16.20 **Temporary Tariff:** Tata Motors objected to the MSEDCL's incorrect Tariff application in case of start-up/ restart-up power drawn from its grid by Windmills, which is charged at LT VII (B) Temporary tariff.
- 2.16.21 **Agriculture - Others:** Nag-Vidarbha Chamber of Commerce, Nagpur suggested limiting the applicability of Agriculture tariff to cold storages used for raw agricultural produce (fruits, vegetables).
- 2.16.22 **Separate category for Arc Furnaces:** Mahindra Sanyo suggested a separate Tariff category for Arc Furnace industries.

#### **Categorisation of Fish Processing**

- 2.16.23 Castle Rock Fisheries Pvt. Ltd. submitted that its fish processing Units carry out processing, packing and **storing of seafood for export. As its production is perishable in process, it** needs to have continuous power supply. Hence, it has been categorised under HT-1 C -Industries Continuous (on express Feeder). It requested the Commission to change its tariff from the Commercial to the Industry category.
- 2.16.24 Dolphin Marine Foods & Processors (India) Pvt. Ltd. submitted that MSEDCL is wrongly treating its Unit as commercial by considering it as a fisheries farm. Its Unit is not a farm, but a fish processing and freezing plant. Considering the nature of manufacturing activities in the process, the Directorate of Industries has classified this Unit as an Industrial Unit and granted a Registration Certificate accordingly.
- 2.16.25 The Seafood Association of India submitted that its members have integrated food processing factories comprising integrated ice manufacturing, chilling, pre-processing, canning, cooking, breading, freezing and cold storage for preservation of frozen marine products/seafoods. MSEDCL has wrongly categorised the fish processing /freezing Units in the Commercial instead of Industrial category, and has been charging commercial rates from June, 2014 onwards.
- 2.16.26 Sea Saga Enterprises Pvt. Ltd. and others submitted that they operate fish processing Units which involve activities like ice manufacturing, chilling, pre-processing, packaging and storage. Initially they were charged as per the Industrial tariff, but later MSEDCL started charging Commercial tariff without prior intimation. They requested the Commission apply the HT-I Industry tariff to them.
- 2.16.27 Similarly, Naik Oceanik Exports Pvt. Ltd. submitted that they have established integrated food processing factories consisting of integrated Ice Manufacturing, Chilling, Pre-processing, Processing, Canning, Cooking, Breading, Freezing and integrated Cold Storage for preservation of frozen marine products/ sea foods. They submitted that there exists ambiguity as regards classification of the consumer category and applicable tariff for fisheries, aquaculture and cold storage units.
- 2.16.28 They requested the Commission to create a new category as per Government of Maharashtra- GR No. PSI-2013/ (CR-54)/ IND-8 dated 1 April, 2013, based on which fish processing has been classified under Mechanized food/agro processing industries. They further requested Commission that the Frozen Meat & Frozen Fish may be classified under agriculture produce and the HT V (Agriculture) tariff may be implemented. However, since the process consist of manufacturing of Ice, processing, Freezing, Chilling etc. which are clearly demarcated industrial activities taking place in their integrated food processing and cold storage units hence such integrated units are not eligible for HT V (Agriculture tariff) and therefore requested that such integrated units should be considered under HT-I Industry.

### **Categorisation of R&D Units**

- 2.16.29 Bajaj Auto submitted that the Commission has categorised R&D activities in commercial premises (non-residential, non-industrial premises) as a commercial consumer, where applicable tariff is HT II (A) or (B). It submitted that above categorisation is ambiguous which leaves the scope for misinterpretation by field officers about applicable tariff categorisation.
- 2.16.30 Shri Ankush M Pawar submitted that every R&D activity purely made for their main mother plant though such plants have separate point of supply, it is to be categorised as HT-I Industry and not HT-II(A) or (B).
- 2.16.31 Venketshwara Hatcheries Ltd. submitted that, in pursuance of High Court Order dated 7 April, 2015 in Writ Petition 5449 of 2014, in the matter Venketshwara Hatcheries Ltd. (Writ Petitioner), there is a direction to the Commission to treat representation by Writ Petitioner under Case No. 57 of 2013 as suggestion/objections in the matter of public notice in MSEDCL MYT Petition (Case 121 of 2014) and allow Writ Petitioner to participate in Public Hearing at Pune on 10 April, 2015. During the Public Hearing, the objector reiterated its plea to classify all the Research and Development Units in relation to Poultry breeding, Hatching and Poultry farming and allied activities, both situated inside and outside the hatcheries and poultries under the category HT-V (Agriculture). It further submitted that its Poultry Diagnostic Research Centre (PDRC) situated at Pune-Solapur Road, carries out activities related to research and disease diagnostic services for poultry breeders and poultry farmers all over India.

### **Tariff for BioTech Industries**

- 2.16.32 Praj Industries Ltd., Pune, submitted that it has industrial Bio-tech unit established under Bio-tech policy of Government of Maharashtra, 2001. It pointed out that based on the said Bio-tech policy, Bio-tech units are to be supplied electricity at industrial tariff rate. Giving the details of its unit, Praj Industries Ltd. submitted that it has separate registration from Department of Industries, Bio-Tech Park, and under Factories Act (In process).
- 2.16.33 It was highlighted that based on the policy provisions laid down by GoM, "Bio-tech Units" are eligible to get various incentives under package Scheme of incentive- 2001, 2007, 2013 which includes provision of power for Bio-tech units at industrial tariff. In spite of this, S.E. (PRC), Pune has changed their tariff category from industrial (HT I) to commercial (HT II) w.e.f. November 6, 2011 same was implemented in monthly bill from December 2011. It further submitted that it is using electricity for their Bio-tech unit working for own product development, prototype manufacturing units, design & development which is ancillary to its manufacturing units, design & development of products and technology, which are the integral parts of its manufacturing facility and process. In view of the above, it requested Commission to consider its objection for

applying industrial tariff similar to IT and ITES for Bio-tech unit, instead of applying commercial tariff (HT-II).

### **Tariff for Metro**

- 2.16.34 CIDCO submitted that GoM has authorised it to provide Mass Rapid Transit (Metro) system in Belapur-Pendar-Kalamboli-Khandeshwar section in three phases. The works for the phase-1, between Belapur and Pendhar has already commenced. CIDCO highlighted that the said metro system will be run by a public utility organization with no profit motive and will provide transport facilities to passengers at subsidised rates. It was submitted that the proposed Navi Mumbai metro will have essentially two types of load i.e., Auxiliary and Traction. Most of the auxiliary load at metro Stations (about 95%) are for public services like lighting, escalators, lifts, fire fighting, air conditioning, etc., with some of the load for advertising and retail space (about 5 %). MSEDCL has three different type of tariff for these loads as 1) Traction Tariff (Rs. 7.81 per kWh), 2) Auxiliary load tariff (Public service tariff) (Rs. 8.21 per kWh + Rs 190 per kVA per month demand charges) and 3) other Auxiliary Loads (Commercial Tariff) (Rs. 9.83 per kWh +190 per kVA per month demand charges). CIDCO further submitted that the existing tariff of MSEDCL for traction is on higher side as compared to other metro systems across the Country. Further, Auxiliary tariff (Public Services tariff) is still higher compared to the tariff structure of other services provider like TATA and Reliance for the same category. CIDCO added that the different tariff structure would also require them to have separate meters for traction at two Feeders and 4 meters for auxiliary Feeder at each sub-Station. As the project is largely for public interest, CIDCO requested the Commission to fix a single tariff for the Metro Power supply which would be lower than the prevailing tariff structure of MSEDCL.

### **Ports**

- 2.16.35 Jawaharlal Nehru Port Trust (JNPT) submitted that it is currently treated as commercial category. It stated that the services of the objectors are covered under Essential Services Maintenance Act, which is handling containers. The use of electricity is primarily for functioning of cranes and power supply to refrigerated containers and supply is required on a 24 X 7 basis. It further stated that the ports cannot be treated as commercial establishments as the activities performed are of essential industrial nature. The objector requested that the ports may be excluded from the Commercial category and a separate category may be created for them.

### **Aquaculture**

- 2.16.36 Maharashtra Aquaculture Farmers' Association submitted that Aquaculture farming was being treated as an industrial activity and was being charged accordingly. However MSEDCL is proposing to charge aquaculture farming as a commercial activity. This action is pending due to a stay granted by High Court, Mumbai in the matter of Writ Petition No. 3556 of 2013. It was submitted that in



aquaculture farming, water is required all the time for running water pumps to fill up the ponds and to run aerators. The association highlighted that Aquaculture farming in its very nature is a farming activity and is neither industrial nor commercial. They further stated that the Electricity Regulatory Commissions of the States of Kerala, Tamil Nadu & Andhra Pradesh have passed Orders effectively treating aquaculture as agriculture activity in the respective States.

**MSEDCL's Reply**

**Powerlooms**

- 2.16.37 MSEDCL replied that it agrees with the suggestions made by the consumers and proposed that a separate category may be created as Cottage Industries for Power Loom and Flour Mills.

**Tubewells within Housing Societies**

- 2.16.38 As regards tariff for Tube wells in Societies, MSEDCL submitted that the Commission has already dealt with the matter in Order dated 16 August, 2012 in Case No. 19 of 2012.

**Residential Slab Structure**

- 2.16.39 MSEDCL submitted that the domestic category consumers account for about 20 to 21% of the total sales volume of MSEDCL. It pointed out that the current telescopic slabs and tariff in domestic category has been in practice since long time and the change in socio- economic status and electricity usage requires reviewing the present telescopic slabs.
- 2.16.40 Considering the historical usage pattern, paying capacity, monthly electricity requirement along with the discussions at various levels and some issues in the present slab structure, MSEDCL has proposed to have different slab-structures for domestic category of consumers.
- 2.16.41 MSEDCL further submitted that the rising cost of power generation has made it imperative to give more attention on Demand Side Management while designing consumer tariffs. It is expected that price signals would make the consumers to bring in efficiency in the use of electricity and thereby making the use of electricity at a reasonable level. Accordingly, for high end consumers (having consumption above 500 Units per month), MSEDCL has proposed to keep uniform Energy Charges for entire consumption. MSEDCL expects that such new price regime will give sufficient signals to high end consumers for restricting non essential consumption thereby bringing in discipline in electricity consumption.
- 2.16.42 Subsequent to the Public Hearing, MSEDCL submitted that considering the feedback from various consumers during the hearings, MSEDCL has proposed following slabs for Residential Slabs. MSEDCL further submitted that the tariff for 0-100 Units last shall be unchanged and further tariff will be determined based on the capacity to pay which is in line with Tariff Policy.

<b>Proposed Slabs for Domestic Category</b>
<b>0-100 Units per month</b>
<b>101-300 Units per month</b>
0-150 Units
151-300 Units
<b>301-500 Units</b>
0-150 Units
151-300 Units
301-500 Units
<b>Above 500 Units</b>

### **Government owned Educational Institutes & Hospitals**

- 2.16.43 MSEDCL submitted that the ATE in its Judgment dated May 30, 2014 in the Appeal No. 227 of 2012 and IA No. 20 of 2014 has ruled as follows:

*“....., it is open to the State Commission to differentiate the retail supply tariff of Government owned and operated educational institutions and hospitals from privately owned and operated ones in terms of the findings of this Tribunal in judgment dated 28.8.2012 in Appeal no. 39 of 2012. The State Commission shall consider the proposal of the Appellant in this regard if submitted in future and decide the issue after considering the suggestions and objections of the public.”*

- 2.16.44 Pursuant to above Judgment, MSEDCL has proposed to introduce a separate consumer category consisting of all government owned, managed and operated educational institutions and hospitals.

### **Temporary tariff for start up power**

- 2.16.45 On the issue of tariff applicability for Start-up power MSEDCL submitted that it is applying the correct tariff for Start-up of Windmills as per the Orders of Commission.

### **R&D Units**

- 2.16.46 MSEDCL submitted that the Commission has correctly differentiated the R & D Units situated in or outside Industrial Premises. MSEDCL further submitted that it is not proposing any change in the existing categorization applicable to the R & D Units as approved by the Commission in its Tariff Order dated 16 August, 2012 in Case No. 19 of 2012.

### **Regarding Tariff for BioTech Industries**

- 2.16.47 In reply to Praj Industries on the issue of industrial tariff for Bio-tech industry, MSEDCL submitted that as per the present tariff applicability, the consumer has been correctly charged with the applicable tariff. MSEDCL further stated that it has examined various issues regarding the classification of consumer litigations arising due to wrong categorization, based on the feedback received during interaction with field officers, in an exhaustive manner. MSEDCL added that the powers to

decide the tariff category vests with Commission. However in its additional submission, MSEDCL has submitted that it has no objection in providing Industrial tariff to Bio-tech Industries as long as bonafide Industrial use is established.

**Regarding Tariff for Metro**

- 2.16.48 In reply to suggestion by CIDCO regarding single tariff for all metro activities, MSEDCL submitted that considering the Traction purpose, it has categorized the Mono/Metro rail under HT-Railways category based on Commission's recognition of Metro and Mono rail under HT- Railways tariff category in TPC-D's Tariff Order dated 12 September, 2010 in Case No. 98 of 2009.
- 2.16.49 MSEDCL further submitted that even for TATA-D and R-Infra D (the Distribution Licensees in Mumbai) the Commission has approved the different tariffs for Traction and Railway Workshops & shops on the platforms/railway Station, etc. However, MSEDCL submitted that in case all the activities carried out at METRO Station including traction load if connected at single point, then single tariff may be provided. Further, in case separate meters are available for measuring consumption other than for traction use, then such supply shall be billed as per the parent category of the usage.

**Regarding other tariff categorisation issues**

- 2.16.50 MSEDCL submitted that it has examined various issues regarding the classification of consumer litigations arising due to wrong categorization. Based on the feedback received during interaction with field officers, MSEDCL has proposed applicability of Tariff to different category of consumer in exhaustive manner. MSEDCL further submitted that the powers to decide the Tariff category vests with the Commission.

**Commission's Rulings**

- 2.16.51 The Commission has examined the Tariff proposal of MSEDCL and also examined all the suggestions/objections made by various consumers. Based on the suggestions received and also after considering the Judgment of the ATE in relation to categorisation of consumers, the Commission has decided on the matter of new categorisation in this Tariff Order.
- 2.16.52 The Commission noted that applicability of Tariff was one of the major objections during the public process. In the section covering Tariff Philosophy under Chapter 6 of this Order, the Commission has elaborated its views regarding consumer categorisation and applicability of Tariff for various categories.
- 2.16.53 It is worthwhile to note the ATE, in its Judgement dated 20 October, 2011, in Appeal No.110,111,170,171,201 & 202 of 2009 and 70,71,78,79,80,81 & 82 of 2010, has clarified that the consumer categories can be created based on the intent or purpose of use by the consumer.

- 2.16.54 As regards the written submission by certain objectors for providing further opportunity to submit their objections and to fix a hearing date, the Commission is of the view that, due public consultation in the present Case has already been carried out and adequate opportunity was provided for all interested stakeholders to submit their suggestion/objections. The details of public process carried out by the Commission have been elaborated in Chapter 1 of this Order. During the said process, the Commission gave opportunity for interested consumers to present their written and/or oral submission in the matter. The Commission has ensured that the due process, contemplated under law, was followed at every stage meticulously to ensure transparency and public participation. The Commission notes that there was no representation from the said objectors during the Public Hearing process. In view of the above, the Commission is of the opinion that adequate opportunity as envisaged under law has already been given and does not find merit in holding another hearing in the matter. However, the Commission has decided to take their written submission on record and has also considered the same while deciding the matter.

## **2.17 Categorisation of Cold Storage**

### **Objections / Suggestions**

- 2.17.1 Mauli Cold Storage, Ahmadnagar, Mahavir Cold Storage, Ahmednagar Cold Storage Association, Tuljabhawani Cold Storage Pvt. Ltd., Shri Anand Cold Storage & Agro Products, M/s Mauli Cold Storage, Ripening & Cold-Chain People (Radhe Shyam), Dhan Laxmi Cold Storage, Arihant Cold Storage, MSJ Cold Storage, Mahavir Cold Storage, K.S. Cold Storage and others objected the proposed change of the applicability of Agriculture tariff to Cold Storage consumers with condition to limit its applicability only for storage of Raw Agriculture produce (Fruits/Vegetables). Vidarbha Cold Storage Association, Nagpur and others submitted that the Commission itself had passed Order on 12 September, 2010 in the Case No. 111 of 2009. In the said Order the Commission had in a landmark development decided to include all cold storage and pre cooling units under agriculture tariff. They further added that MSEDCL has once again tried to flout the spirit of the MERC Order and now proposed to add to burden of Cold storage owners in following ways. The term raw agriculture produce (Fruits/Vegetables) is very narrow and excludes many agriculture crops such as Food grains, pulses, spices, Dairy products etc from the application of agriculture tariff. Cold storage are used for storing multiple agri food commodities ranging from spices, vegetables, fruits, dry fruits, dairy products, meat, chicken, fishery products, fruits & vegetables in various forms. They further submitted that if the Commission allows the MSEDCL to implement the proposed changes, it would be a massive blow to the efforts of the Government to ensure low food inflation and reduce food wastage.

- 2.17.2 Ripening & Cold-Chain People (Radhe Shyam) submitted that the Central Government in its policy framework on Cold Storage has clearly put onus on Cold Storage operators to ensure design of the unit such that it is used for a number of commodities and for a larger period through the year. Acceptance of proposed Petition will trap all units between the two different guidelines and create unnecessary confusion in operation of such Cold Storages. MSEDCL has so far sought to deny the beneficial tariff for processed agricultural produce. However, they submitted that it is difficult to describe the natural form of any produce or if so, use the infrastructure efficiently for doing so.
- 2.17.3 It was further stated that, since most Cold Storage units are designed for multi commodity usage, in order to avoid the litigations/harassment from the field staff and due to narrow definition of agricultural produce, they will be forced to pay commercial tariff. Further, they highlighted that MSEDCL at the same time has irrationally shifted the definition of Cold Storage to commercial category from the industrial category, which is again baseless and illogical.
- 2.17.4 Shri Pratap Hogade, MVGS, Shri Shakeel Ansari, Maharashtra Electricity Consumers Association, Arihant Cold Storage submitted that the original category of 'Pre-cooling and Cold storage for agricultural products' should be unchanged. Same should be done for HT-V agricultural category.
- 2.17.5 Shri Ashish Chandrana highlighted that MSEDCL is now proposing to modify the tariff applicability for cold storages. He further submitted that the basic objective behind giving agriculture tariff to cold storages irrespective of ownership pattern is to incentivize and promote the capacity building process in cold storages wherein India is badly lacking and about approximately Rs 65,000 Crore worth crop is getting wasted due to lack of required cold storage infrastructure.

**MSEDCL's Reply**

- 2.17.6 MSEDCL submitted that it has examined various issues regarding the classification of consumer litigations arising due to wrong categorization. Based on the feedback received during interaction with field officers, MSEDCL has proposed applicability of Tariff to different category of consumer in an exhaustive manner.
- 2.17.7 MSEDCL states that considering the number of litigations and to remove the ambiguity in the minds of consumers, it has clearly differentiated the applicability of the cold storage based on the nature of supply and the purpose for which the supply is required. Accordingly, MSEDCL submitted the following proposal.
- a) Pre-cooling & cold storage for raw Agricultural Produce (Fruits/vegetables) : Agriculture Category
  - b) Cold storage Co-operative Society for storage of self produce, Food Processing including Fishing/Aquaculture: Industrial Category
  - c) Cold storage for finished product, marketing purpose, or other purposes not specified in any other category: Commercial Category.

- 2.17.8 MSEDCL further submitted that the powers to decide the Tariff category vests with the Commission.

**Commission's Ruling**

- 2.17.9 The Commission observes that MSEDCL has proposed to treat tariff for cold storages under three different categories. The Commission has also noted the suggestions of various objectors in the matter. The detailed scope of tariff applicability and associated terms and conditions for cold storages, tariff philosophy adopted by the Commission along with applicable tariff for these categories has been elaborated in Chapter 6 of this Order.

**2.18 Merger of Continuous and Non Continuous Categories**

**Objections / Suggestions**

- 2.18.1 Shri Dilip D.Bhattacharjee and Alloy Steel Producers Association of India submitted that MSEDCL has proposed merger of Continuous and Non-Continuous Category. Considering the current situation, MSEDCL has surplus power available and it should not charge premium tariff from the current continuous Feeder consumers in the merged category. Shri Hemant Kapadia submitted that tariff rates for Express and Non Express Feeders have been proposed with the same tariff which means no shortage of power in the State. Considering this aspect the tariff of seasonal industries shall be kept at par with regular HT/LT industries.
- 2.18.2 R.L. Steels & Energy Limited welcomed MSEDCL's proposal for clubbing of sub-categories viz. Express Feeder and Non Express Feeder and submitted that such clubbing will save the consumers of Non Express Feeders from the harassment of employees of MSEDCL.
- 2.18.3 Bharat Forge and Hindustan Polyamides & Fibres Ltd., submitted that rates fixed for Express Feeder consumers should be lower than those fixed for Non Express Feeder consumers, considering the fact that Express Feeder consumers are supposed to incur the total cost of providing infrastructure facility along with 1.3% supervision charges; this means total infrastructure cost is to be fully borne by Express Feeder consumer and not by DISCOM.
- 2.18.4 Century Enka Ltd. submitted that uniform tariff for express and non express Feeder should guarantee no load shedding except under emergency circumstances.
- 2.18.5 Shri. Shreekar Balwant Soman, Vidarbha Chamber of Commerce & Industry, Akola highlighted that change of tariff category from continuous to non continuous is resulting in loss of about Rs 400 Crore and thereby deficit in ARR.

**MSEDCL's Reply**

- 2.18.6 MSEDCL submitted that with the concerted efforts and additional availability of power, it has withdrawn the load shedding in majority of its Feeders in the State (almost 85% of Feeders). MSEDCL submitted that with sufficient power

availability, time has come to do away with the bifurcation of continuous and non continuous categories. Therefore, MSEDCL has proposed to bridge the gap between continuous and non continuous categories and have Tariffs for these two sub categories in such a manner that resultant tariff component (Fixed as well as Energy Charge) payable by both the type of (continuous and non continuous) consumers on express and non express Feeders may be same.

**Commission's Ruling**

- 2.18.7 The Commission observes that MSEDCL has proposed to bridge the gap between continuous and non continuous categories and has proposed Tariffs for these two sub categories in such a manner that resultant tariff component (Fixed Charge as well as Energy Charge) payable by both the type of (continuous and non continuous) consumers on express and non express Feeders may be same. At present the difference in Energy Charge between consumers on Express Feeders and Non-Express Feeders appear in the range of Rs 0.81 per unit (HT-I Industry), Rs 0.74 per unit (HT-II Commercial) and Rs 0.64 per unit (HT-VIII Public Service). While recognizing MSEDCL's submission that with sufficient power availability time has come to do away with the bifurcation of continuous and non continuous categories, the Commission opines that impact on the tariff for consumers in these categories and consequent impact on the revenue from these categories cannot be ignored.
- 2.18.8 The differentiation in terms of Energy Charge applicable for these categories has evolved over the period of time for historical reasons. Besides, it is well recognized that the Energy Charge component also includes a component of the Fixed Costs of MSEDCL since only a part (~15%) component of Fixed Costs are recovered through Fixed Charges (i.e., Demand Charges). The consumers on the express Feeders have been receiving uninterrupted supply and have been spared from load shedding in the past. Hence, the Commission believes that any movement towards merging of two categories at least in terms of uniform tariff application will have to be gradual. Accordingly, in this Order, the Commission has strived to reduce the gap between Energy Charges for consumers on Express Feeders and Non-Express Feeders. The net difference in approved Energy Charge for consumers on Express Feeders and Non-Express Feeders under these categories work out to Re. 0.50 per unit (HT-I Industrial), Re. 0.53 per unit (HT-II Commercial), Re. 0.48 per unit (HT-VIII Public Service) and Rs 0.22 per unit (HT-IV Public Water Works).
- 2.18.9 The tariff philosophy and applicable tariff considered by the Commission for these categories has also been elaborated in Chapter 6 of this Order.

**2.19 Separate tariff for EHV consumers**

**Objections / Suggestions**

- 2.19.1 Bharat Forge submitted that as of now there is no separate tariff category specified for EHV consumers. They mentioned that EHV consumers are presently considered under HT category with only additional benefit of 3% rebate on Energy Charges. They requested the Commission to frame a basic tariff structure/category for EHV consumers instead of giving merely EHV supply rebate on Energy Charge. Further, it was requested that the 3% EHV supply rebate be granted on total Fixed / Demand Charge, Energy Charge, ToD charge and FAC compared to the present practice of giving the rebate on Energy Charge and ToD charge only.
- 2.19.2 MCCIA submitted that the Commission in its Order dated 16 August, 2012 and ATE Judgment dated 26 July, 2012 expressed that EHV category will be created after determining the voltage wise cost of supply. They also requested the Commission that 3% EHV rebate should be given on Fixed / Demand Charges, Energy Charges, ToD and FAC rather than giving only on Energy Charges and ToD only.
- 2.19.3 Alloy Steel producers association of India submitted that there is lower level of EHV Rebate, for Electric Arc Furnace (EAF) industry where bulk consumers draw power at Extra High Voltage levels ( $\geq 132$  kV) and where percentage loss level are minimal as compared to lower voltage levels.
- 2.19.4 SAIL submitted that MSEDCL should provide EHV incentive of 5% to EHV consumers having Contract Demand 5 MVA & above.

### **MSEDCL's Reply**

#### **On Separate Tariff for EHV**

- 2.19.5 MSEDCL replied that it has been proposing tariffs based on categories that are according to the existing framework. MSEDCL submitted that it is not authorised to decide the tariff category of the consumers based on their usage of electricity and stated that the right to determine the tariff and decide the consumer category vests with the Commission.

#### **On EHV Rebate on total Bill**

- 2.19.6 MSEDCL submitted that the Commission has already decided the issue in Case No. 113 of 2014 of which relevant extract reproduced as under was referred:

*“10. In view of the foregoing, the Commission clarifies that it has provided in its Order a rebate for EHV supply computed on the base Energy Charge plus ToD charge. FAC or other charges are not included for the purpose of computation of the rebate.”*

- 2.19.7 On the issue of lower level of EHV rebate, MSEDCL submitted that it has been providing EHV rebate to eligible consumers as approved by the Commission.
- 2.19.8 On the issue of incentive, MSEDCL submitted that the tariff mechanism is based on cost plus methodology and hence in case of any rebate given to a particular



category will have to be passed on to the other consumers. However, determination of tariff and tariff philosophy and allowing a rebate to any particular category comes under the purview of the Commission and MSEDCL submitted that it will comply with the directives of the Commission.

**Commission's Ruling**

- 2.19.9 The Commission observes that it is necessary to undertake detailed analysis of Voltage-wise Cost of Supply (VCoS) to be able to make rational judgment for creation of separate tariff category for EHV consumers. At present, the Commission has decided to continue with current practice of extending rebate at the rate of 3% on Base Energy Charge plus ToD charge for all EHV consumers availing supply at 66 kV and above, as currently under operation. However, the Commission shall scrutinize and explore the need for creation separate tariff category for EHV consumer in future. The Commission hereby directs MSEDCL to account for all relevant data for EHV consumers such as their consumption, revenue, rebate etc. and submit the same at the time of next tariff determination process.

**2.20 Separate Tariff for 1 MW Consumers**

**Objections / Suggestions**

- 2.20.1 Shri Kiran Paturkar, Federation of Industries Association Vidarbha, Shri Ashish Subhash Chandrana, VUEL and others submitted that there should be separate Tariff for consumers who have Contract Demand of 1 MW and above.
- 2.20.2 Shri Jayant Deo submitted that separation of energy required by bulk consumers (1 MW plus) is necessary while determining tariff in order to protect retail consumers. He further submitted that the Commission has to treat bulk consumers on separate footing as they have a choice of suppliers and hence benefit of competition. Retail consumers who do not have choice need to be protected and hence, energy required for retail sale should not be clubbed with bulk sale, in the Merit Order procurement. By treating two sets of consumers, one with choice and other without choice-on same footing will amounts to denial of justice to retail consumers.
- 2.20.3 Shri Ashish Chandrana submitted that in spite of the willingness expressed by the Commission to create new tariff category for consumers having Contract Demand of 1 MW or more (probably with the intention to plan a tariff to deal with the upcoming threat of migration of consumers to OA and thereby adverse impact on financial health of MSEDCL), MSEDCL did not find it necessary to propose such tariff category. He alleged that such non-action reflects the lack of seriousness on the part of MSEDCL to retain consumers having 1 MW or more Contract Demand.

**MSEDCL's Reply**

- 2.20.4 MSEDCL submitted that the Commission has already addressed the issues related the consumers having Contract Demand of 1 MW in Case No. 50 of 2012.

MSEDCL further submitted that the Commission has the powers to decide the tariff categories.

**Commission's Ruling**

- 2.20.5 The Commission in its Order dated 2 January, 2013 in Case No. 50 of 2012 has deliberated and addressed the issues related to tariff determination for consumers having Contract Demand of 1 MW and above. In the said Order, the Commission has observed that option of OA provided under Section 42 is an enabling provision and should not be interpreted to mean that all such consumers must necessarily avail OA. Therefore, the Commission is of the view that while determining the Tariff, it is not appropriate to discriminate amongst the consumers based on their eligibility for availing OA and hence not determined separate Tariff for consumers having load of 1 MW and above.
- 2.20.6 The consumers with Contract Demand above 1 MW are eligible to avail OA. The determination of Wheeling Charges and CSS has bearing on the OA transactions. The Commission has elaborated the rational and principle for determination of Wheeling Charges and CSS separately in this Order. All other categorization related changes made through this Order have been dealt under Chapter 6.

**2.21 Hike in Fixed Charges**

**Objections / Suggestions**

- 2.21.1 Shri Vivek Velankar, Sajag Nagrik Manch strongly objected to MSEDCL's proposal to increase the Fixed Charges. He also added that increase in Fixed Charges on express Feeders is not justifiable as they have already paid huge charges to MSEDCL to get the infrastructure in place.
- 2.21.2 Shri Vijay Jadhao, MIDC Industrial Association, Amravati submitted that if an industry is spending more than 50% of its Opex on electricity, such industry should be charged at high Fixed charges at the start of the project itself and should be provided tariff at lower Energy Charges after beginning of project.
- 2.21.3 Shri B S Khandare submitted that proposed increase in Fixed Charges is 25% and slab wise increment is again 25%. Hence, the total tariff hike for 125-300 unit consumers would be 75% more than the current tariff, which is unacceptable.
- 2.21.4 Shri Shyamal Banerjee, Advocate submitted that increase of Fixed/ Demand Charge of LT I Domestic consumers to the tune of 15% and for LT II non-domestic to the tune of 16% to 17% are on the higher side and this will adversely impact the consumers of the above mentioned category
- 2.21.5 Thane Small Scale Industries Association objected to the rise in Fixed Charges and suggested that there should be decrease in the electricity rates for Small Scale Industries. Also pointed out that, MSEDCL has suggested 16% hike in Fixed Charges and in case of HT non-express Feeders consumers the hike in electricity

- rate is 4%. In this context, concern was expressed by them that such increase is indeed very high and needs to be reduced.
- 2.21.6 Bharat Forge objected that the proposed hike in Fixed Charges / Demand Charges from Rs 190 per KVA to Rs 220 per KVA is very high.
- 2.21.7 Shopping Centres Association of India (SCAI) and Dilip Bhattalwar also complained about the significant increase in the Fixed Charge and Energy Charges as proposed.
- 2.21.8 Chamber of Small Industries Association (COSIA), All India Meat and Live Stock Exporters Association, Forstar, Allana Cold Storage Pvt. Ltd. and other Cold Storage associations objected to MSEDCL's proposed 16% hike in Fixed Charges. They highlighted that such increase would lead to the effective rate of tariff being the highest among all other States in India.
- 2.21.9 Shreekar Balwant Soman, Vidharbha Chamber of Commerce & Industry, Ms. Ria Nadkarni, Chandrapur Ferro Alloy Plant, the Lagoon Restaurant and others submitted that the hike in Fixed Charges is uncalled for and requested the Commission to take necessary action against the same. Shri. Shreekar Balwant Soman, Vidharbha Chamber of Commerce & Industry submitted that the consumer has to suffer heavy burden in such cases even though they do not utilize the power.
- 2.21.10 Shri Nasimuddin Ansari suggested that Fixed Charges should be charged as per the supply available per day per hour. Aam Aadmi Party, Pune objected to MSEDCL's proposed increase of 16% in Fixed Charges and 17% on Energy Charges for crematoriums and burial grounds. Shri Nilesh Ghope and Shri Rahul Kadu proposed that Fixed Charges for Residential, public water services, street lights, schools, hospitals should not be increased. Instead they suggested that, advertising hoardings should be charged double Fixed Charges in order to compensate for any deficit.

#### **MSEDCL's Reply**

- 2.21.11 MSEDCL submitted that it has been the Commission's policy of recovering the Fixed Costs of MSEDCL through a Fixed Tariff applicable to the consumers (to the extent possible). The Commission in its Order dated 5 May, 2000 while determining the Fixed Charge component of the tariff ruled that, the recovery of Fixed Costs should come from Fixed Charges and has also observed that the Fixed Charge component of tariff needs to be gradually increased in due course to cover the actual Fixed Costs incurred.
- 2.21.12 MSEDCL further submitted that in the June 2008 Tariff Order, the Commission unilaterally decided to reduce the Fixed Charges applicable to different categories of consumers citing the reasons of reduced availability of power. At that point of time also, the power supplied to certain categories of consumers was maintained without any reduced supply. As such, MSEDCL stated that the said reduction was unwarranted.

- 2.21.13 Further, MSEDCL added that in the Tariff Order dated 12 September, 2010, the Commission had observed that “...once sufficient power is available and contracted by the licensees, the Fixed/Demand Charges can again be increased...”
- 2.21.14 MSEDCL highlighted that at present around 85% of the State is free from any kind of Load Shedding. MSEDCL further mentioned that it has been following load shedding as per the Principles and Protocols of Load Shedding approved by the Commission where Distribution and Commercial Losses are high. The demand supply gap for the past 9 years has reduced drastically from 4,000+ MW to less than 600 MW. MSEDCL therefore stated that it has sufficient power and has contracted enough power to meet the ever-increasing demand of the State. MSEDCL expressed its capability to meet the shortfall of around 600 MW and to provide power to areas facing load-shedding, provided the losses are in limit and bills are paid regularly.
- 2.21.15 MSEDCL further submitted that considering the fact about additional availability of power to the consumers resulting in uninterrupted supply of power to majority of consumers, the Fixed Charges need to be gradually increased so as to recover the fixed component of MSEDCL’s expenses through Fixed Charges.
- 2.21.16 MSEDCL further submitted that against 40% of recovery that should have been allowed by the Commission through Fixed Costs, only 14% is allowed through Fixed Charges. This is against the basic principle of recovery which has been followed by the Commission.
- 2.21.17 In view of the above, MSEDCL stated that it has proposed increasing the Fixed/Demand Charges for various categories by around 15% and 25%.

**Commission’s Ruling**

- 2.21.18 The Commission observes that various consumers have objected to MSEDCL’s proposal of increase of Fixed/Demand Charges by 16% to 25%. Regarding the levy of Fixed Charges and Demand Charges, the Commission has explained the rationale for the same earlier in its various Tariff Orders. The same is also in accordance with the EA, 2003 and the Tariff Policy notified by the Ministry of Power (MoP), Government of India. At present, the Fixed Costs constitute ~ 54% of annual revenue requirement of the licensee whereas revenue recovery through Fixed Charges constitutes ~14% of the total revenue. Levy of Fixed Charges and Demand Charges at prevalent rates would not result in any Windfall gain to the licensee, since they are recovering only a part of the Fixed Costs through levy of Fixed Charges. Further, with proposed increase in Fixed Charges the revenue recovery from Fixed Charges would form around 16.8% of total revenue. The Commission notes that the proposed rationalization in Fixed Charge is unlikely to result into significant tariff burden for consumers, since Fixed/Demand Charges typically contribute only a small part of the total monthly bill of the consumer.

- 2.21.19 Further, with simultaneous rationalization of Energy Charges undertaken as elaborated in Chapter 6 of this Order, the proposed rationalization in Fixed Charge is unlikely to result into significant tariff burden for consumers.
- 2.21.20 Other issues related to tariff design have been dealt with in the Chapter 6 wherein Tariff philosophy and Tariff design related aspects have been covered in detail.

## **2.22 Rebates and Incentives**

### **Objections / Suggestions**

- 2.22.1 Technova, Sanghi Udyog Pvt. Ltd., Chamber of Small Industries Association, Owens Corning India Pvt. Ltd., All India Meat and Live Stock Exporters Association, Captive Power Producers Association, Allana Cold Storage Pvt. Ltd., Alloy Steel producers association of India, Bharat Forge and others submitted that there is a reduction in ToD Rebate proposed from existing level of 250 paise to 150 paise per unit for the industries who plan to operate at night. They submitted that this has to be avoided as it is the only way which would help the enterprise optimise its electricity bill. Can-Pack India, Frigorifico Allana Pvt. Ltd., Castlerock Fisheries submitted that there should be an increase from 85 paise to 250 paise per unit in ToD rebate, and the rebate should be more than 250 paise and should have an increasing trend.
- 2.22.2 Shri Vijay Jadhav, MIDC Industrial Association, Amravati suggested that Tariff rates at night should be low. He also suggested that economically backward small enterprises should be given 1000 units of electricity free of cost.
- 2.22.3 Shri Nilesh Ghope and Shri Rahul Kadu submitted that residential and agricultural consumers should also receive electricity at discounted rate during night time. They also suggested that agricultural pumps should be provided with electricity at free of cost; as it uses electricity only for 6-8 months per year and provides raw material for many industries as well as provides employment.
- 2.22.4 Haldiram Food International Pvt. Ltd. submitted that ToD rebate for Solar power units generated, during day time is being deducted from Zone-A readings. They suggested that, this practice should be stopped forever and necessary Orders should be issued to refund earlier deductions made for the purpose. Shri Dilip Bhattalwar enquired whether ToD rebate for Solar Generators will be extended for all categories.
- 2.22.5 Shri Kiran Paturkar representing Federation of Industries Association Vidarbha submitted that as per Regulatory Format - Form No. 15(1) – Revenue at proposed tariff for FY 2015-16, MSEDCL is losing the Revenue by providing Paise 150 per unit night rebate from 22:00 hours to 06:00 hour during FY 2015-16.
- 2.22.6 Shri. Shreekar Balwant Soman, Vidarbha Chamber of Commerce & Industry submitted that Mahagenco is generating more than 50% of electricity in Vidarbha

- region. Vidarbha is industrially backward region and suggested that there should be 10% rebate in Energy Charges for consumption in the region.
- 2.22.7 Shri Pratap Hogade, MGVS, Shri Shakeel Ansari, MECA and Maharashtra Rajya Sahakari Vastrodyog Mahasangh Maryadit submitted that proposed reduction of Power Factor incentive from 7% to 5%, proposed reduction of ToD discount from Rs. 2.5 per unit to Rs. 1.5 per unit and the proposed increase in threshold for load factor incentive level from 76% to 86% would indirectly increase burden of electricity cost for consumers, and the same is not acceptable. In view this, it was requested to keep the level of incentives same as they exist today.
- 2.22.8 Shri Ashish Chandrana submitted that reducing Power Factor incentive is injustice to the industrial consumers who are maintaining the highest Power Factor and who are helping MSEDCL to reduce their Technical Losses. By providing 2% more PF incentive, MSEDCL is not loosing much amount but it is a big relief for industrial consumers. Alternately, he suggested that in case MSEDCL feels that they are loosing more amount by providing PF incentives, they can propose to raise penalties for maintaining lesser PF for compensating 2% proposed reduction of incentive losses. He requested the Commission not to reduce Power Factor incentives and may impose more penalties for those maintaining lower Power Factor. SAIL Chandrapur, Shri Suhas Khandekar, CREDAI, Nagpur, Tensile Wires Pvt. Ltd. and Shri Dilip Bhattalwar submitted that MSEDCL's proposal to reduce Power Factor incentive to 5% from existing 7% is against basic principles and it should not be accepted. They also suggested that the Commission should reject the proposal of MSEDCL to reduce ToD rebate during night time from Rs 2.50/unit to Rs 1.50/unit.
- 2.22.9 Further, several objectors raised issues related to penalty for leading PF.
- 2.22.10 Dr. M.V.Goyanka, Laghu Udyojak sangh suggested that night hour incentive and load factor incentives provide double incentive for the same action and very few industries are able to take benefit of the same. Hence, they suggested to remove load factor incentive and the savings done through this should be used to reduce HT tariffs. Central Railways, the Meadows Holidays and Resorts Pvt. Ltd., Mumbai, Chamber of Marathwada Industries and Agriculture, Bright Steel Corp., Marathwada Association of Small Scale Industries & Agriculture, Trimurti Foods and Sanjay Techno Products Pvt. Ltd. suggested that all incentives including night rebate may be retained at current levels.
- 2.22.11 Central Railways requested the Commission to give 10% rebate as granted by MPSEB to provide impetus to electrification of Railway network in the State of Maharashtra

**MSEDCL's Reply**

**For ToD Rebate**

- 2.22.12 MSEDCL submitted the below Table showing comparative trend analysis of share of night consumption to total consumption of categories availing ToD rebate. Looking into the trend, MSEDCL stated that the share of night consumption to total consumption has been fairly similar even after changing the level of ToD Rebate from 100 paise/kWh to 250 paise/kWh from January 2013:

**Table 6: Night Consumption**

<b>Year</b>	<b>Night Consumption(MU)</b>	<b>Total Consumption of Categories availing ToD (MU)</b>	<b>Share of Night Consumption</b>
FY 2013-14	9,304	32,326	29%
FY 2012-13	9,613	34,570	28%
FY 2011-12	9,703	33,628	29%

- 2.22.13 Analysing the trend, MSEDCL stated that the demand during the day or night is nearly similar and the load curve is almost flattened. Considering this, MSEDCL stated that the additional benefit is being enjoyed by the same set of consumers and the burden of the same is getting spread on to other consumers of MSEDCL.
- 2.22.14 MSEDCL further submitted that only few selected consumers operating 24x7 are getting the advantage of higher ToD rebate, however, it feels that the uniform benefit of ToD must be available without any discrimination to eligible consumers operating in shifts. As a first step, MSEDCL has therefore proposed a reduction in the ToD Rebate applicable for night consumption.
- 2.22.15 In view of the above submission, MSEDCL has proposed a revised ToD Rebate for night consumption of Rs. 1.50 per Unit which is still higher than the ToD Rebate approved by the Commission in its Order in Case No. 19 of 2012.

**For PF Incentives**

- 2.22.16 MSEDCL submitted that the Commission has incentivised Power Factor improvement beyond 95% to encourage consumers to adopt energy efficient practices and better load management. It added that, the Commission in its Tariff Order for FY 2001-02, had determined the Power Factor incentives for PF of 0.99 and higher such that, if the PF is 0.99, then the reduction in the electricity bills will amount to 5% and for unity PF, the reduction will be 7% considering the fact that a higher Power Factor is beneficial to the Grid.
- 2.22.17 MSEDCL further submitted that as per directives by the Commission, it has been providing the PF Incentives to the eligible consumers. However, now with sufficient power availability, almost 85% State is free from load shedding, MSEDCL feels that the State Grid is fairly stable and time has come to revisit the Power Factor incentives. MSEDCL further submitted that consumer awareness for

grid stability and Power Factor improvement has also increased. Accordingly, MSEDCL proposed to revise the Power Factor incentive to 5% for Unity PF. MSEDCL further submitted that there is only marginal reduction in Power Factor incentive; however mentioned that it is still one of the Utility providing higher incentives in the Country. However, MSEDCL added that the Power Factor Penalty shall remain unchanged and the present PF penalty approved by the Commission in its Tariff Order in Case No. 19 of 2012 shall continue.

- 2.22.18 In reply to the issue of Penalty for leading PF, MSEDCL responded in additional submission that at present no Power Factor penalty is levied in case leading Power Factor is recorded. Considering the technical necessity and demand from some consumers, MSEDCL submitted that the penalty may be levied if the leading Power Factor is recorded as it also affects the system.

**For Billing Demand during off peak period**

- 2.22.19 MSEDCL further submitted that as per prevailing provisions, the demand recorded by a High Tension consumer during night hours is ignored for billing purpose, even though the same exceeds his Contract Demand. Further such consumer, who has exceeded his Contract Demand during night hours, is otherwise considered as eligible for Load Factor Incentive. As per MSEDCL, the consumers are taking undue advantage of such provision and are benefited by paying marginal penalty for exceeding Contract Demand against substantial quantum of Load Factor Incentive.
- 2.22.20 MSEDCL expressed its concern that in case the present provision of “Billing Demand” is continued as it is, then, the consumers may attempt to purposely exceed his Contract Demand during night hours to ensure maximum consumption during night hours and in the process will be benefited in Load Factor Incentive.
- 2.22.21 It was also pointed out by MSEDCL that due to such actions by consumers, there is a risk to grid security which may lead to use of additional protective devices by MSEDCL to protect grid from failure.
- 2.22.22 MSEDCL further submitted that in order to maintain the grid discipline and to avoid such benefit enjoyed by few consumers, MSEDCL has requested the Commission to consider modifying the present provision in respect of “Billing Demand” and the Demand recorded during off peak hours may be considered for billing purpose. Similarly MSEDCL requested that such consumers who have exceeded Contract Demand during night hours may not be considered as eligible for “Load Factor Incentive”.

**ToD rebate for Solar Generators**

- 2.22.23 MSEDCL further submitted that many captive Solar Generators are approaching it for getting connectivity to their Solar PV projects to their internal bus at 33 kV level or below in their factory premises. MSEDCL has been granting the



connectivity to these Solar Generators subject to various conditions as may be approved by the competent authority of MSEDCL.

- 2.22.24 MSEDCL further submitted that Solar power is available during day time only. Most of the captive Solar plants use maximum power from MSEDCL during the night time which is available at cheaper rate considering ToD Rebate. This is causing MSEDCL financial loss from both ways; the loss due to additional ToD tariff for day consumption as well as relief through ToD rebate during the night.
- 2.22.25 Therefore, MSEDCL has proposed that for the purpose of ToD Night rebate calculation, the ToD – A Zone Units less daily Solar generation units needs to be considered.

**Load Factor Incentive formula**

- 2.22.26 MSEDCL submitted that in order to incentivize HT consumers, the MERC had introduced the Load Factor Incentive in the Tariff Order dated 10 March, 2003.
- 2.22.27 MSEDCL further added that when the Load Factor Incentive was introduced, there was huge demand/supply gap and the Load Shedding was inevitable. The weekly staggering days and planned load shedding was implemented to maintain system stability. The average non supply hours were more than 60 hours/month. Hence, while deriving the Load Factor Incentive formula, criteria of “Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme” may have been considered by MERC.
- 2.22.28 MSEDCL further submitted that the Load Shedding to industries on staggering day has been withdrawn w.e.f. February 2012. Load shedding for A, B, C, D, DCL group Feeders also has also been withdrawn and 24x7 supply is available to the industrial consumers. MSEDCL however submitted that till now same formula, which was introduced considering the supply constraint, prevailing at that time is in existence. Therefore, MSEDCL proposed that the above criteria need to be modified so that maximum Load Factor Incentive i.e., 15% is to be given on 100% Load Factor considering present supply scenario. The total rebate under this head will be subject to a ceiling of 15% of the Energy Charges for that consumer.
- 2.22.29 In reply to Shri. Shreekar Balwant Soman, Vidarbha Chamber of Commerce & Industry regarding lower tariff for Vidarbha region MSEDCL submitted that as per the provisions of the Section 62 (3) of the Electricity Act 2003, the Commission may differentiate the tariff for consumers based on the geographical position of any area. The relevant provision of the EA, 2003 referred by MSEDCL is reproduced below:

*62. (3) The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, Power Factor, voltage, total consumption of electricity during any specified period or the time at which the*

*supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.*

**Commission's Ruling**

- 2.22.30 The Commission has noted the objections in this regard and also MSEDCL's response to these objections. The Commission has not allowed any change in incentives and rebate except reduction in ToD rebate for night consumption. The Commission has dealt with these issues and presented its rationale in detail in section covering Tariff Philosophy.

**2.23 Fuel Adjustment Cost**

**Objections / Suggestions**

- 2.23.1 Shri John Pareira Veej Grahak Sanghatana, Vasai, Faizan Azmi, Maharashtra State Powerloom Federation, Shri Manvel Tuscano, Maharashtra Pradesh Janata Dal (S), Vasai and Shri Pius Machyado, Nirbhay Jan Sanstha submitted to cancel levy of Fuel Adjustment Cost (FAC) on agricultural pumps. They further submitted not to increase any tariffs and continue with the approved tariffs in August 2012. They also suggested providing stable tariff for below 300 unit's consumers.

**MSEDCL's Reply**

- 2.23.2 MSEDCL has not responded to this objection.

**Commission's Ruling**

- 2.23.3 The Commission would like to highlight the Regulation 13.5 of the MERC (Multi Year Tariff) Regulations which is reproduced below:

*"13.5 The  $Z_{FAC}$  component shall be applicable to the entire sale of the Distribution Licensee without any exemption to any consumer."*

- 2.23.4 As per above Regulations, FAC charges are to be levied to all consumers without any exemption. Exempting agriculture categories from levy of FAC charges, shall mean under-recovery of fuel related costs or passing on the burden to other consumer categories, which would not be appropriate and also not permissible as per provisions of the MYT Regulations.
- 2.23.5 In view of above, the Commission is not inclined to exempt agriculture pump set from levy of FAC charges as proposed by the objector.

**2.24 Load Shedding**

**Objections / Suggestions**

- 2.24.1 Shri. Shreekar Balwant Soman, Vidarbha Chamber of Commerce & Industry submitted that MSEDCL has stated that overall losses in State are about 13.5% and revenue recovery is 96.13% anticipated in FY 2015-16. They further submitted that in case if the figures given by MSEDCL are true then there is no need to impose

- any load shedding in Maharashtra. But 21% area of Maharashtra is facing critical problem of load shedding for duration of 5 to 7 hours daily.
- 2.24.2 Shri Dilip Bhattalwar submitted that as MSEDCL claims in the subject Petition that sufficient power is available without any shortage, it is suggested that the Commission may direct MSEDCL to stop load shedding on agriculture Feeders in day time.
- 2.24.3 The Malegaon co-operative spinning mills Ltd. submitted that Load shedding could have been avoided if MSEDCL could have reduced losses by 5% per annum since 2003.
- 2.24.4 Prayas submitted that Commission has not published any analysis based on the hourly Feeder data published by MSEDCL. Further the Commission has also not kept a track of load relief and actual supply to agriculture consumers. They also added that indicative data shows disparity between even urban and peri-urban areas.
- 2.24.5 Several objectors raised issue of load shedding in Schools/Exam Centre during Examination period. They further asked MSEDCL to relook into its practice of distribution and commercial loss based load shedding.

**MSEDCL's reply**

- 2.24.6 MSEDCL submitted that it is carrying out load shedding as per the protocol approved by the Commission. Further, during the Public Hearing, MSEDCL also submitted that it has surplus power.
- 2.24.7 In reply to objection, MSEDCL submitted that it has been supplying power to the Agriculture Consumers as per the Government of Maharashtra Directives.

*“1. Power supply to Agricultural pumps shall remain 8 hrs per day only.*

*2. Whenever there is surplus power in the System, up to 10 hrs per day power supply shall be given at night to the 50 % agricultural consumers and remaining shall avail power supply during day time for 8 hrs three phase availability rotationally.”*

- 2.24.8 This issue of providing power supply to Agriculture pumps has already been discussed and ruled by the Commission in Order dated 9 May, 2011 in Case No. 81 of 2010 as follows:

*“.....As above said policy decision was taken by the GoM in view of ensuring the sustainable development and optimal use and management of the State water resources to provide the greatest economic and social benefits to the people of Maharashtra, the Commission does not find any reasons for deviating from the same.”*

- 2.24.9 Accordingly, MSEDCL submitted it has been providing power supply to Agriculture pumps as directed by the GoM and as approved by the Commission.

- 2.24.10 In reply to objection of load shedding in Schools/Exam Centers during Examination period MSEDCL submitted that as a policy, except break downs or any emergency disruption and disconnections due to unpaid bills, generally the decision has been taken by MSEDCL not to have any load shedding in Schools/Exam Centers during examination period.
- 2.24.11 On the issue of Distribution and Commercial Loss based load shedding MSEDCL submitted in additional submission that based on the power availability with MSEDCL, necessary steps have been taken in this regard and a separate plan for Load Shedding in the MSEDCL area will be submitted to the Commission.

**Commission's Ruling**

- 2.24.12 The Commission had issued suo-motu Order on 26 November, 2012 in Case No. 41 of 2012 in the matters related to load shedding protocol being implemented by MSEDCL. In the said Order, various issues related to load shedding have been already dealt with.
- 2.24.13 The Commission notes the various submissions made by MSEDCL on implementation of load shedding protocol. However, the Commission opines that load shedding protocol was devised as load regulation measure to address significant power shortage situation then prevalent in the State. In case when there is sufficient availability of power, no consumer should be subjected to load shedding. The Commission strongly feels that electricity is a catalyst for growing economy therefore, it is imperative that all citizens of Maharashtra are provided with uninterrupted power supply. Reducing the technical and commercial losses and improving collection efficiency is the responsibility of the Distribution Licensee. Hence, the Commission rejects MSEDCL's stand to apply load shedding protocol when there is sufficient availability of power in the system. The Commission directs MSEDCL to ensure that load shedding protocol is used only as load regulation measure in the shortage situation and not as a matter of routine.

**2.25 Supply to Other Licensees**

**Objections / Suggestions**

- 2.25.1 Serene Properties Pvt. Ltd., a deemed Distribution Licensee for Airoli SEZ submitted that availing hot Stand-by supply from any of the existing pool participant should not be made mandatory. It was highlighted that the CE STU made it mandatory for it to seek hot stand-by arrangements from MSEDCL. It further submitted that Fixed Charges for the Stand-by supply should be at the rate applicable to the normal IT industries as per MSEDCL Tariff. It further requested that the deemed Distribution Licensee (SEZ) should be granted the status of regular pool participant and any over-drawal and under-drawal be settled as per UI/FBSM mechanism by MSLDC.

**MSEDCL's Reply**

- 2.25.2 MSEDCL submitted that as per proviso 6 to Section 14 of the Act, when two or more persons seek licence for distribution of electricity within the same area, then they are supposed to do so through their own distribution system. MSEDCL further submitted many of the SEZs (Deemed Distribution Licensee) are keen to procure Stand-by power in addition to regular power from MSEDCL, however it is not compulsory for MSEDCL to supply Stand-by power to them and as such it is the responsibility of the Deemed Distribution Licensee to arrange the power.
- 2.25.3 MSEDCL further submitted that the proposed demand charges of Rs. 600 per kVA per month for the demand component demanded by MSEDCL is in line with the Commission's approved charges for Mumbai Licensees i.e., TATA, BEST and RInfra-D. MSEDCL further submitted that the issue of availing hot Stand-by and status of regular State pool participant is beyond the scope of present proceedings.
- 2.25.4 Further, in its additional submission post Public Hearing, with regard to Supply to other Licensees, MSEDCL submitted that the Stand-by power supply shall be provided by MSEDCL to other Distribution Licensee/ deemed Distribution Licensee in line with MERC Order dated 26 August, 2012 in Case No. 165 of 2011. It further submitted that Demand Charges for Stand-by power may be Rs. 600 per kVA per month and the Energy Charges for Stand-by power will be billed on block wise frequency based UI rate or MSEDCL Marginal Price, whichever is higher or any other tariff of subsidising consumers. Over-drawal units (i.e., Actual drawal units by Deemed Distribution Licensee minus [Scheduled units by the Generator of Deemed Distribution Licensee plus Scheduled units by MSEDCL against stand-by supply]) will be charged by MSEDCL as per the SMP/UI charges or temporary tariff of MSEDCL whichever is higher.
- 2.25.5 Considering the social obligations of the Government Organizations, MSEDCL submitted that in case of the SEZs owned/ managed/ controlled by Government of Maharashtra, the electricity supply may be as per the mutually agreed terms and conditions.

**Commission's Ruling**

- 2.25.6 The Commission notes that the distribution business of SEZs as deemed Distribution Licensee, will be governed and regulated by Appropriate Commission, for which it is necessary to seek approval from Appropriate Commission for its Special Conditions of License to operationalize its deemed Distribution Licensee operations. Thus, SEZs may choose to arrange for their power sourcing requirement upon seeking due regulatory approval further to notification of special conditions of licence for such SEZs (deemed Distribution Licensees). The energy exchange by such SEZs with other utilities will have to be governed as per balancing and settlement mechanism approved by the Commission from time to time. However, such deemed Distribution Licensees (SEZs) will have to be members of the State Imbalance Pool subject to the conditions governing such state pool participation.

- 2.25.7 Further, there could be few SEZs that may choose not to undertake deemed licensee operations and may wish to source power from MSEDCL or concerned Distribution Licensee on single point basis. However, the Commission is of the considered view that supply under such arrangement will have to be governed as per the principles applicable for Franchisee operations.
- 2.25.8 Accordingly, the Commission rules that power supply to SEZs shall be governed as per conditions outlined in above paragraphs depending on the option that SEZ chooses to undertake for its deemed licensee operations. Hence, the Commission has rejected MSEDCL's request to determine any tariff for bulk supply arrangement to SEZs and to approve stand-by power supply for SEZs, under this Order.

## **2.26 Quality of Power Supply**

### **Objections / Suggestions**

- 2.26.1 Prayas submitted that the Commission has not shown in analysis regarding supply and service quality concerns. Prayas further added that till date no public process regarding compliance to standards of performance had been undertaken. They highlighted that consumers were routinely denied compensation approved by CGRF and Ombudsman by simply challenging these Orders before the High Court, even in the absence of any stay Order from the High Court, payment for compensation was not made. They pointed out that the Commission was well aware of this issue but had chosen not to take any concrete action against such practices. They added that several progressive suggestions were made by various consumer representatives when the amendment of standards of performance regulations was undertaken, neither was these suggestions accepted nor any reasons have been given for not considering them.
- 2.26.2 Various objectors raised issue that there should be proper mechanism for implementation of CGRF Orders and there is a need for a specific programme for increasing consumer awareness on the subject.
- 2.26.3 Few objectors also highlighted that MSEDCL has not been publishing the performance indices on a regular basis, as is stipulated under the SOP Regulations.

### **MSEDCL's Reply**

- 2.26.4 MSEDCL has submitted that as directed by the Commission in Case No. 104 of 2014, MSEDCL has already formed a Committee under the chairmanship of Chief Engineer (Commercial) for effective monitoring of the implementation of Orders issued by CGRF in the favour of consumers. A compliance reporting system is being formulated so as to avoid unnecessary litigations and timely compliance.
- 2.26.5 In additional submissions MSEDCL submitted that there are shortcomings in certain issues and necessary procedural aspects are being taken up at various levels.

MSEDCL further submitted that all the efforts have been taken to improve the consumer related services. To reduce the time consuming process and to problems faced by consumers, MSEDCL has already initiated many actions to improve customer services such as operationalising 14 State of the art Consumer Facilitation Centers (CFCs) at Major Urban Centers. In addition, 31 small CFCs have also been established at Sub Divisions, 24 X 7 operating Centralized Customer Care Centre has been commissioned at Bhandup and Pune, Online bill payment facility has been made available for all LT consumers across the State. All HT consumers are under Automatic Meter Reading (AMR) management, Consumer can receive billing information through SMS alert and also, through SMS.

- 2.26.6 MSEDCL agreed with the need to have a specific programme for increasing consumer awareness and submitted that it will draft a consumer awareness programme in consultation and association with various Consumer Groups and Representatives.

**Commission's Ruling**

- 2.26.7 The Commission has noted the concerns expressed by objector. The Commission observes that adherence to Standard of Performance by Distribution Licensee and compliance monitoring thereof is crucial. The Commission is dealing with numerous CGRF cases and has been issuing appropriate and timely directions to MSEDCL for necessary action.
- 2.26.8 Under Order in Case No. 104 of 2014, the Commission has expressly stated its concerns on non-compliance of CGRF/Electricity Ombudsman (EO)'s Orders by MSEDCL assuming serious proportions. Accordingly, MSEDCL was directed to set up a Committee under a Chief Engineer for the effective monitoring and compliance of CGRF/EO's Orders. The Committee have been entrusted with the responsibility of laying down clear timelines and the steps to ensure compliance with CGRF/EO's Orders, including intimations of compliance to the CGRF/EO as provided in the Regulations, along with penalties against the concerned officers for non-compliance. As per the latest status, the Committee is working on a detail report as per directions in the said Order, which is expected to be submitted to the Commission shortly.
- 2.26.9 Further in view of the suggestions received from the public, the Commission hereby directs MSEDCL to update the performance indices on a monthly basis on its website and also submit quarterly report to the Commission in accordance with Regulation 10.3 of MERC (Standard of Performance of Distribution Licensees, period for giving supply and determination of compensation) Regulations, 2014.
- 2.26.10 In addition, under para 2.10 related to metering, billing and consumer service related aspects, the Commission has extensively dealt with the measures for improving customer services and outreach activities and necessary directions have been given, which MSEDCL need to comply with and submit quarterly report in

the matter. However, the specific instances of non-compliance or delay in compliance cannot be addressed in the present proceedings. The Commission grants liberty to objector to file separate Petition in the matter, if necessary. MSEDCL may use electricity bills as important communication/outreach tool for improvement of consumer awareness.

## **2.27 Passing on NCE cost to Polluting Industries**

### **Objections / Suggestions**

- 2.27.1 Shri Kiran Paturkar, Federation of Industries Association Vidarbha and Vidarbha Industries Association submitted that MSEDCL's proposal of imposing additional procurement charges of RE power on industries is not correct. They submitted that industries are also sharing additional burden of incremental cost of sourcing RE power in addition to cost of running and maintaining pollution control equipment. MSEDCL has to consider that industries are invested huge amount on pollution control equipment for mitigating pollution and incurring running cost and maintenance for mitigating pollution and become non polluted industry. They submitted that the proposal of MSEDCL is an additional burden and imposition of double taxation on them.
- 2.27.2 Shri Dilip Bhattalwar submitted that utilization of RE is need of the hour and it is the duty of everyone, therefore MSEDCL should be allowed to impose 'Green Cess' on Energy Charge from all consumers except Agriculture and Residential (BPL) category. However, MSEDCL should be directed to utilize the entire collected amount towards purchase of RE only.
- 2.27.3 Chamber of Small Industries Association highlighted that the Renewable Purchase Obligation is the result of Government decision and most of the pollution is created by the government owned PSU's and therefore private companies should not be punished for the same.
- 2.27.4 Several Consumers including CPPPA objected to MSEDCL's proposal for allocating NCE cost to Polluting Industries and pleaded not to approve such proposal of MSEDCL.

### **MSEDCL's Reply**

- 2.27.5 MSEDCL stated that it has always promoted NCE generation in the State and has executed long-term EPA's with the RE Generators in line with MERC guidelines issued from time to time. MSEDCL has fulfilled the Non Solar RPO targets set by MERC for FY 2010-11 (5.77%) and FY 2011-12 (7.14%). MSEDCL has adequately contracted with the NCE Generators to fulfill its non Solar RPO targets up to 2014-15. However, it mentioned that due to infirm nature, the energy received is not as per contracted capacity. The Commission under its Order dated 24 December, 2012 has allowed MSEDCL to carry forward the Solar RPO in FY



2010-11 and FY 2011-12 up to FY 2015-16 along with fulfilment of regular target by FY 2015-16.

- 2.27.6 MSEDCL added that though the promotion of NCE is part of the national mission, it is not appropriate to achieve the same at the cost of common consumers. It pointed out that the tariff determined by the Commission is very high for RE sources and average cost of purchase from renewable Power of MSEDCL has increased from Rs. 3.94 per unit to Rs. 4.36 per unit. This has direct impact on ARR of MSEDCL and tariff thereof.
- 2.27.7 As a Distribution Licensee, MSEDCL expressed its willingness to purchase the RE power to meet the RPO target but, the cost of RE power should be passed on to the entities which are predominantly responsible for generation of Greenhouse gases, pollution and the climate change. Therefore, MSEDCL has requested the Commission to pass on certain charge to the polluting industries as a first step toward recovering incremental cost of renewable power purchase. MSEDCL has further requested the Commission that the Industries belonging to “Red Category” as categorized by Maharashtra Pollution Control Board (MPCB) may be identified and said burden of renewable purchase may be passed on to them.
- 2.27.8 However, in its additional submission post Public Hearing, MSEDCL submitted that during the Public Hearings many consumers have objected for RPO Charges for Polluting Industries. MSEDCL further stated that the idea behind such charges proposed was to promote DSM Measures and curb extravagant consumption of power. Therefore, MSEDCL submitted that if the Commission deems fit some surcharge may be levied on the avoidable consumption by Industries/Consumers.

**Commission’s Ruling**

- 2.27.9 The Commission observes that in accordance with the provisions under Section 86(1) (e) and Section 61 (h) of EA, 2003, the Commission has formulated RE Tariff Regulations and RPO Regulations for promotion of the RE development in the State. Accordingly, the Commission determines the preferential tariff for renewable sources from time to time. The cost for procurement of RE by Distribution Licensee is passed on through Annual Revenue Requirement upon due regulatory scrutiny and approval. Hence, the Commission opines that there is no need for separate provisioning for passing of such costs. Besides, the issues associated with non-compliance of the pollution control norms by polluting industry (if any) does not fall within the jurisdiction of the Commission and the same will have to be dealt by Competent Authority on merit of specific case. Accordingly, the Commission rejects the proposal of MSEDCL to pass on NCE related costs through tariff to polluting industries.

**2.28 Applicability of Local Body Tax (LBT)**

**Objections / Suggestions**

- 2.28.1 Shri. Om Prakash and others of Amravati alleged that MSEDCL is illegally imposing LBT along with the tariff to the consumers of Amravati. According to the objectors, LBT should be paid by MSEDCL to Amravati Mahanagar Palika and consumers should not be asked to pay the same through their electricity bill. MSEDCL should stop charging LBT to its consumers and refund amount to consumers already collected under this head. It was also highlighted that MSEDCL is levying LBT to consumers without Commission's approval.

**MSEDCL's Reply**

- 2.28.2 MSEDCL submitted that the GoM (Urban Department) authorised levy of LBT in 16 Municipal Corporation with effect from 1 April, 2010. State Government has issued Notification exclusively authorizing the Aurangabad Municipal Corporation to levy LBT against "Electrical Energy" at the rate of 2% on 18 February, 2012. MSEDCL under its Petition in Case No. 25 of 2013, had approached the Commission with request to allow recovery of LBT levied by Aurangabad Municipal Corporation on the M/s GTL (then Distribution Franchisee in Aurangabad) from consumers in Aurangabad Municipal Corporation area.
- 2.28.3 MSEDCL added that, as advised by the Commission, it had approached GoM on the issue of applicability of LBT on Electricity. GoM vide Notification dated 10 September, 2013 had exempted levy of LBT on 'Electricity' with prospective effect in Aurangabad Municipal Corporation area. Further, MSEDCL stated, it had approached the Government of Maharashtra for clarification of applicability of LBT on Electricity for previous period i.e. from 1 April, 2012 to 9 September, 2013. However, it did not receive any clarification about the decision of the Government regarding withdrawal of levy of LBT on Electrical Energy with retrospective effect by amending the notification dated 10 September, 2013.
- 2.28.4 Similarly, as the State Government has also issued Notification exclusively authorizing the Amravati Municipal Corporation to levy LBT against "Electrical Energy" at the rate of 2% vide Notification dated 20 February, 2014; MSEDCL submitted that it has started recovery from the consumers situated in Amravati Municipal Corporation from the billing month of August, 2014 onwards for equal number of months for which LBT is due for/ till actual amount to be paid as LBT is recovered. In this regard MSEDCL has also made a representation to Principal Secretary (Energy), Government of Maharashtra vide letter dated 23 July, 2014 with a request to withdraw the notification dated 20 February, 2014 which authorizes the Amravati Municipal Corporation to levy LBT against "Electrical Energy" at the rate of 2%.
- 2.28.5 MSEDCL submitted that the LBT amount along with the taxes paid by residents of the Municipal Corporation area and grants from the State government would be utilized by the Municipal Corporation for providing necessary community services like health care, educational institution, housing, transport etc. MSEDCL further submitted that if the LBT amount due is recovered through ARR, the same would

amount to discriminatory treatment to the rest of the consumers who would not receive any benefit of any developmental works done by the respective Municipal Corporation. Besides, MSEDCL mentioned that the benefit of works done by the respective Municipal Corporation is restricted to few select consumers situated in the geographical jurisdiction of the said Municipal Corporation and moreover since this is a local tax, the same can be recovered and paid to the Corporation only from the consumers of that area.

**Commission's Ruling**

- 2.28.6 The Commission opines that levy of local body tax over and above approved Energy Charges on the consumption for recovery from consumer amounts to modification of the Tariff. The Commission observes that no component of the Tariff can be modified or levied without prior approval of the Commission. Any recovery in excess of tariff approved by the Commission shall not be in conformance with prevalent Tariff rates approved by the Commission. Accordingly, the Commission directs MSEDCL to not levy LBT on the consumers. However, the Commission directs MSEDCL to separately file Petition with specific instant for recovery of the costs associated with Local Body Tax.

**2.29 Addressing infrastructure requirements for Malegaon**

**Objections / Suggestions**

- 2.29.1 Various objectors during Public Hearing submitted that the infrastructure scheme to be implemented in Malegaon has been proceeding at a very slow pace over past decade and the same should be carried out at a faster pace to ease out the acute distribution congestion, tripping/interruption and to improve voltage profile in the respective distribution area. Citing the above, the objectors demanded for a new EHV subStation at Malegaon and to create a new distribution circle in Malegaon.

**MSEDCL's reply**

- 2.29.2 Replying to this objection, MSEDCL submitted the following status of development of distribution / transmission infrastructure for Malegaon.

*New EHV SubStation at Malegaon:-*

- *Presently there is one number of 132/33 KV, 2\*50 MVA S/stn at Sinner, has a maximum load of 82.4 MVA. In addition to this, 3 Nos. of 33/11 KV subStation i.e. 33 KV Datali (1\*5 MVA), 33 KV Chass (1\*5 MVA) and 33 KV Shaha (1\*5 MVA) are sanctioned under Infra II which are proposed to be connected from 132 kV Sinner subStation.*
- *The ample load shall be spared at 132 kV Sinner SubStation in the event of establishment of 220/33 KV Datali SubStation. Further it is to state that there is good connectivity on 33 kV level by which the load of the existing*

*132 KV MIDC Malegaon (Sinner) can be easily diverted into existing 132 kV Sinner subStation.*

- *The spare load at existing 132 KV Sinner SubStation in the event of establishment of 220/33 kV, 3\*50 MVA Dattali subStation can be utilized for catering the existing and proposed load at MIDC Malegaon subStation.*
- *Considering the present technical aspects and the proposed load diversion of existing 132/33 kV, 2\*50 MVA at Sinner, 132/33 kV, 2\*50 MVA at MIDC Malegaon (Sinner) and proposed 220/33 kVA, 3\*50 MVA at Dattali subStation, second new subStation at MIDC Malegaon (Sinnar) is not viable. Review of load growth shall be taken in future and if found technically feasible, then fresh proposal will be submitted to MSETCL for sanction.*

*Circle Office at Malegaon*

- *MSEDCL submitted that as per the MSEDCL approved standards, in order to treat a distribution area as a Division, the said Division should have 8 SubDivisions and 240000 Consumers. However, Malegaon Division has 6 Sub-Divisions and 167920 Consumers.*
- *MSEDCL further submitted that for making a new Circle Office, it should have minimum 5 Divisional Office and 6,00,000 Consumers. However, Malegaon, Satana, Manmad, Kalvan and Chandvad Divisions have total 548063 Consumers.*
- *Further, MSEDCL submitted that the Circle office is Administrative Office where Administrative Approvals, data collection etc. takes place. Therefore, MSEDCL as a policy decision has decided not to add Administrative Offices in order to reduce the Administrative expenses.*
- *Therefore, considering the above submissions, it will not be advisable for MSEDCL to make Malegaon Division as Circle.*

**Commission's Ruling**

- 2.29.3 The Commission has noted the response of MSEDCL. The Commission is of the view that MSEDCL should take all necessary steps including infrastructure development in it area so as to ensure that consumers do not suffer on the quality of service in the area. In this context, MSEDCL is directed to undertake detail technical study about adequacy of distribution infrastructure considering future load growth in the region and take up suitable measures including setting up necessary distribution infrastructure in Malegaon area.

**2.30 Fatal System Incidences & Planning for Safety System Upgradation**

**Objections / Suggestions**

- 2.30.1 Few Objectors during Public Hearing have raised issues related to several safety issues, and referred to accident incidences in the past and desired to know about the action plan by MSEDCL for reduction of accidents.

**MSEDCL's Reply**

- 2.30.2 MSEDCL submitted that all reported accidents, received by MSEDCL are classified and analyzed on the basis of predefined causes for annual dossier preparation. MSEDCL highlighted the following key aspects regarding its preparedness to ensure safety within its Distribution area.

**Safety Management Teams**

- 2.30.3 MSEDCL submitted that in order to conduct detailed investigation of accidents as well as to help field staffs to take measures for accident reduction, Regional Training Centre-wise, four Safety Management Teams covering all 14 Zones have been formed and monitoring of above is done on regular basis.

**Action Plan for Reduction of Accidents / Zero level**

- 2.30.4 MSEDCL expressed its commitment to bring down accidents to Zero level by implementing various precautionary measures such as providing requisite Tools & Pliers i.e., Discharge Rod, Safety Belt, Hand gloves, Helmet to all line staff / Operators and ensuring that all the above safety equipment is being used during such activities. It was added that, if any negligence is found in training activities with the safety awareness or in adherence to safety practices the same is dealt seriously. In addition, all Earthings provided in the Distribution network are being maintained as per IE Rule 1956 & National Electric Code IS 3043 -1987 and Code of practice for earthing. Regarding construction work, MSEDCL stated that it is ensuring that the same is done as per standard methods and in accordance with the Rule. Moreover, MSEDCL submitted that it has notified Safety Measures guidelines as per Administrative Circular 208 dated 07 February, 2009, and all designated safety officers, have been instructed to scrupulously follow the Safety Measures guidelines mentioned in the above Circular.

**Commission's Rulings**

- 2.30.5 The Commission has noted the objection and the response by MSEDCL in the matter. However, the Commission opines that strict adherence to safety standards and protocol need to be followed to avoid any accident and regular monitoring and upkeep of safety devices, training of operating staff and consumers is equally important. In this context, the Commission directs MSEDCL to develop comprehensive plan to conduct consumer awareness programmes at circle/sub-Divisions level and also annual training/grading system for its team. A safety guidelines and manual should be published on the website.

**2.31 Voltage wise Cost of Supply and Energy Balance**

**Objections / Suggestions**

- 2.31.1 Several objectors during Public Hearing argued that MSEDCL should submit details of voltage wise cost of supply and also provide Energy Balance accordingly.

**MSEDCL's Reply**

- 2.31.2 In reply to the several objections received, MSEDCL worked out the VCoS and Energy Balance for FY 2015-16 and the same was presented to the Commission as part of its additional submission. MSEDCL stated that since the actual data based on voltage-wise cost has not been maintained, the bifurcation of the voltage-wise cost has been undertaken on the basis of an assumption, which is also in line with the ATE Judgment. MSEDCL presented its computation of VCoS alongwith assumptions which are detailed out under Chapter 6.

**Commission's Rulings**

- 2.31.3 The Commission has noted the objections and submissions made by MSEDCL in respect of VCoS. The Commission has analysed the submissions made by MSEDCL and has dealt with this issue under the Chapter 6 related to Tariff Philosophy wherein Commission's views in respect of determination of VCoS have been elaborated.

**2.32 Revenue on account of change in tariff**

**Objections / Suggestions**

- 2.32.1 Shri Ashish Chandrana submitted that despite Commission's directive in the Order in Case No. 19 of 2012, of allowing shifting from HT-I Continuous to HT-I Non-Continuous category for a period of 30 days only, MSEDCL continued to allow number of applications of consumers to shift from higher tariff to lower tariff. This has resulted in significant revenue shortfall to MSEDCL. The objector further alleged that while doing so, arbitrary process was adopted and selective few consumers were given benefit retrospectively and few lawful beneficiaries were given relief belatedly with prospective arrangement.

**MSEDCL's Reply**

- 2.32.2 MSEDCL in its additional submission stated that the matter is sub-judice with the Commission and also a PIL is pending in High Court.

**Commission's Rulings**

- 2.32.3 The Commission has noted the objections and submissions made by MSEDCL in respect of revenue loss on account of change in tariff. The Commission has worked out the approximate loss of revenue on account of this and considered the impact of the same while approving ARR of FY 2013-14 and FY 2014-15. The details of the treatment regarding this have been covered under Chapter 3 related to ARR for FY 2013-14 to FY 2015-16.

### **3 DETERMINATION OF AGGREGATE REVENUE REQUIREMENT FOR FY 2013-14 TO FY 2015-16**

#### **3.1 MYT Control Period**

- 3.1.1 MSEDCL has sought approval for its ARR for FY 2013-14 to FY 2015-16 and for determination of tariff for FY 2015-16. In this Section, the Commission has analysed all the elements of actual revenue and expenses for FY 2013-14 and the first half of FY 2014-15, and the projection of revenue and expenses for the second half of FY 2014-15 and for FY 2015-16.
- 3.1.2 FY 2013-14 is over, and MSEDCL has submitted the Audited Accounts for the financial year with its Petition. While scrutinizing and approving the expense and revenue components for FY 2013-14, the Commission has considered the actual amounts as per the audited Annual Accounts after prudence check. However, with regard to some controllable parameters such as O&M Expenses, IoWC and Distribution Loss, for which specific norms or targets have been specified in the MYT Regulations, the expenses have been allowed on a normative basis.
- 3.1.3 As these are controllable parameters under the MYT Regulations, any difference between the actual expenses and the normative levels has been shared between MSEDCL and consumers. By allowing the impact of sharing of gains and losses now, the Commission intends to avoid any carrying cost burden on consumers which would arise if the recovery of such impact is deferred. Several responders and Consumer Representatives also favoured such treatment. Hence, the Commission has undertaken sharing of gains/losses for FY 2013-14 in this Order even though it has not been sought by MSEDCL in its Petition.
- 3.1.4 The Commission has scrutinized and analyzed each component of the ARR projection for FY 2014-15 and FY 2015-16, and provisionally them in accordance with the MYT Regulations.

#### **3.2 Sales in FY 2013-14 to FY 2015-16**

##### **Sales in FY 2013-14**

- 3.2.1 MSEDCL submitted the actual month-wise and category-wise sales in FY 2013-14. Total sales amounted to 85,631 MU, including energy sold to consumers in the Franchisee areas of Bhiwandi, Aurangabad, Nagpur and Jalgaon. If the sale is considered at the input level to these Franchisees, then the total sales in FY 2013-14 amount to 87,304 MU.

##### ***Commission's Analysis***

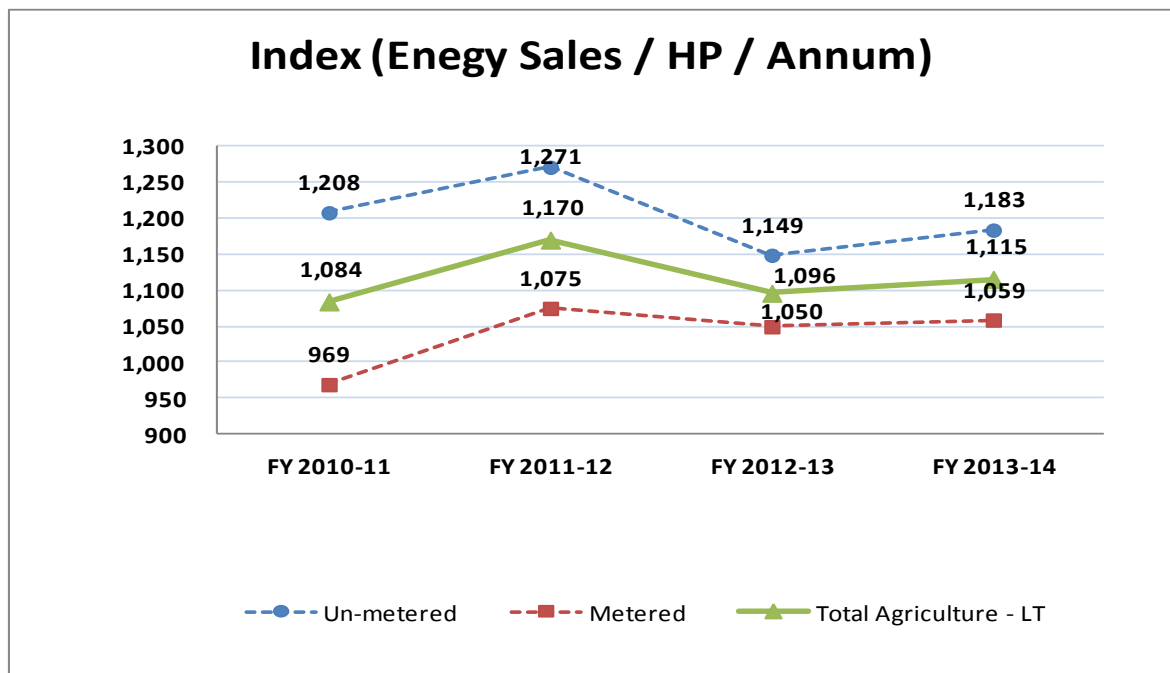
- 3.2.2 The Commission has verified the actual category-wise sales reported by MSEDCL in its Petition vis-à-vis sales as per its Audited Annual Accounts for FY 2013-14.



The he category-wise and total sales in the Petition match the total sales of 85,631 MU as reported under the notes to MSEDCL's Audited Accounts.

- 3.2.3 MSEDCL has submitted that the Index of un-metered agricultural consumption has been arrived at based on the consumption recorded by metered agricultural consumers with normal progressive meter reading status, i.e. excluding meters with zero or negative consumption.
- 3.2.4 For the metered consumers, the maximum consumption was capped at 224 kWh/HP/month based on a maximum of 10 hours of supply per day and 300 days of operation per annum.
- 3.2.5 Based on the data for agriculture consumption submitted by MSEDCL for the past four years FY 2010-11 to FY 2013-14, the Commission has analyzed the Agricultural Sales Index (Units/ HP/Annum) for metered, un-metered and total agriculture sales. The Index parameters for FY 2013-14 are in line with the past years' trend.

**Figure 1: Agricultural Index Trend**



- 3.2.6 Considering MSEDCL's basis for determining the Index for un-metered agriculture consumption for FY 2013-14 and comparative analysis of past trends, the Commission has accepted MSEDCL's submission. However, the Commission reiterates its concerns about MSEDCL's proposed metering plan for un-metered agriculture consumers, and would like to highlight the need for determination of the agricultural consumption Index through a comprehensive study by an independent third-party. The Commission has elaborated this issue and given necessary directives in Chapter 2 of this Order.

- 3.2.7 Subject to a third-party independent assessment study for ascertaining the un-metered agriculture consumption Index, the Commission is accepting MSEDCL's submission for the time being. However, after receipt of the study report, the Commission may revisit the un-metered agricultural sales of MSEDCL for FY 2013-14, and re-determine the sales of MSEDCL for FY 2013-14, if necessary, at a later stage. In case of such re-determination, the Distribution Loss computation and, accordingly, the computation of sharing of losses and gains will also change for FY 2013-14. However, the impact of such change will not attract any carrying or holding cost.
- 3.2.8 Therefore, for the purposes of this Order, the Commission approves the total energy sales for FY 2013-14 as 85,631 MU, as submitted by MSEDCL and as summarized in the following Table.

**Table 7: Category-wise Energy Sales for FY 2013-14**

Category	FY 2013-14	
	MSEDCL (Actual)	Approved
	MU	MU
<b>HT Category</b>		
HT-I Industry	22,454	22,454
HT-II Commercial	1,867	1,867
HT-III Railways	1,435	1,435
HT-IV Public Water Works (PWW)	1,152	1,152
- HT Agriculture	710	710
- HT Poultry / Special AG	93	93
<b>HT-V Agricultural</b>	<b>802</b>	<b>802</b>
- HT Bulk Supply	194	194
- HT Group Housing	20	20
<b>HT-VI Bulk Supply</b>	<b>214</b>	<b>214</b>
HT- VIII Temporary Supply	4	4
HT-IX Public Services	700	700
HT-X Ports	37	37
HT MSPGCL AUX. SUPPLY	14	14
<b>Total HT Category</b>	<b>28,679</b>	<b>28,679</b>
<b>LT Category</b>		
- BPL (0-30 Units)	138	138
- Consumption > 30 units per month	15,013	15,013
<b>LT-I Residential</b>	<b>15,152</b>	<b>15,152</b>
LT-II Non-Residential	3,574	3,574
LT-III Public Water Works	588	588
- AG: Un-metered Tariff	9,991	9,991
- AG: Metered Tariff(Incl. Poultry Farms)	10,817	10,817

Category	FY 2013-14	
	MSEDCL (Actual)	Approved
	MU	MU
<b>LT-IV Agriculture</b>	<b>20,808</b>	<b>20,808</b>
LT-V Industry	5,373	5,373
LT-VI Street Light	1,263	1,263
LT-VII Temporary Supply	21	21
LT-VIII Advertisements and Hoardings	3	3
LT-IX Crematorium and Burial Grounds	2	2
LT-X Public Services	84	84
LT-Prepaid	12	12
P.D. Consumers	(20)	(20)
<b>Total LT Category</b>	<b>46,860</b>	<b>46,860</b>
Credit Sales	731	731
OA Sales	3,414	3,414
<b>MSEDCL Sales (excluding DF)</b>	<b>79,683</b>	<b>79,683</b>
Consumer Sales in Distribution Franchisee Areas	5,949	5,949
<b>TOTAL Sales (including DF)</b>	<b>85,631</b>	<b>85,631</b>

### Sales in FY 2014-15

- 3.2.9 MSEDCL has submitted that considering the actual sales for FY 2013-14 and six months of FY 2014-15, i.e. up to September, 2014, it has projected energy sales for the second half of FY 2014-15, i.e. from October, 2014 to March, 2015. MSEDCL has projected its un-metered agricultural sales by applying the derived un-metered consumption Index for FY 2013-14, i.e. 1,185 units/HP /Annum for FY 2014-15. Accordingly, MSEDCL has estimated total energy sales of 80,791 MU (excluding Franchisee sales) for FY 2014-15, as against actual energy sales of 79,683 MU in FY 2013-14.

**Table 8: Category-wise Energy Sales for Projection for FY 2014-15  
as per MSEDCL Petition**

Category	FY 2013-14	FY 2014-15		
		As Proposed by MSEDCL in Petition		
		H 1 Actual	H 2 Projected	Total
	MU	MU	MU	MU
<b>HT Category</b>				
HT-I Industry	22,454	12,189	11,907	24,096
HT-II Commercial	1,867	1,066	1,036	2,102

Category	FY 2013-14	FY 2014-15		
		As Proposed by MSEDCL in Petition		
		H 1 Actual	H 2 Projected	Total
	MU	MU	MU	MU
HT-III Railways	1,435	718	710	1,428
HT-IV Public Water Works (PWW)	1,152	587	565	1,152
- HT Agriculture	710	406	330	737
- HT Poultry / Special AG	93	61	68	129
<b>HT-V Agricultural</b>	<b>802</b>	<b>467</b>	<b>398</b>	<b>865</b>
- HT Bulk Supply	194	101	89	191
- HT Group Housing	20	10	8	18
<b>HT-VI Bulk Supply</b>	<b>214</b>	<b>111</b>	<b>98</b>	<b>208</b>
HT-VIII Temporary Supply	4	2	1	4
HT-IX Public Services	700	415	409	825
HT-X Ports	37	37	37	74
HT MSPGCL AUX. SUPPLY	14	35	35	70
<b>Total HT Category</b>	<b>28,679</b>	<b>15,627</b>	<b>15,197</b>	<b>30,824</b>
<b>LT Category</b>				
- BPL (0-30 Units)	138	50	55	105
- Consumption > 30 units per month	15,013	8,863	7,651	16,514
<b>LT-I Residential</b>	<b>15,152</b>	<b>8,913</b>	<b>7,706</b>	<b>16,618</b>
LT-II Non-Residential	3,574	1,991	1,795	3,786
LT-III Public Water Works	588	299	319	618
- AG: Un-metered Tariff	9,991	5,359	4,091	9,450
- AG: Metered Tariff (Incl. Poultry Farms)	10,817	5,846	6,269	12,115
<b>LT-IV Agriculture</b>	<b>20,808</b>	<b>11,205</b>	<b>10,360</b>	<b>21,565</b>
LT-V Industry	5,373	2,856	2,881	5,736
LT-VI Street Light	1,263	662	788	1,450
LT-VII Temporary Supply	21	9	8	17
LT-VIII Advertisements and Hoardings	3	1	2	3
LT-IX Crematorium and Burial Grounds	2	1	1	2
LT-X Public Services	84	81	81	163
LT-Prepaid	12	7	7	14
P.D. Consumers	(20)	(2)	(3)	(5)
<b>Total LT Category</b>	<b>46,860</b>	<b>26,022</b>	<b>23,945</b>	<b>49,967</b>
Credit Sales	731			
OA Sales	3,414			
<b>MSEDCL Sales (excluding DF)</b>	<b>79,683</b>	<b>41,649</b>	<b>39,141</b>	<b>80,791</b>
Consumer Sales in Distribution Franchisee Areas	5,949			6,398

Category	FY 2013-14	FY 2014-15		
		As Proposed by MSEDCL in Petition		
		H 1 Actual	H 2 Projected	Total
	MU	MU	MU	MU
<b>TOTAL Sales (including DF)</b>	<b>85,631</b>			<b>87,189</b>

- 3.2.10 Further, considering energy sales to consumers in the Franchisee areas of Bhiwandi, Aurangabad, Nagpur and Jalgaon, MSEDCL had projected total sales for FY 2014-15 as 87,189 MU. If sale to these Franchisee areas is considered at input level to the Franchisees, then the total sales would be 88,795 MU for FY 2014-15.

***Commission's Analysis***

- 3.2.11 As sought by the Commission, MSEDCL submitted its actual energy sales for FY 2014-15 till February, 2015, i.e. 11 months, as against 6 months as submitted under the Petition. For estimating sales for the entire FY 2014-15, the Commission has projected the energy sales for March, 2015 by applying the category-wise y-o-y growth rate (11 months of FY 2014-15 over the corresponding 11 months of FY 2013-14) to actual sales for March, 2014, and arrived at the total energy sales for the entire FY 2014-15 as under:

**Table 9: Category-wise Sales for FY 2014-15 as per additional submission by MSEDCL**

Category	FY 2014-15 Actuals for 11 months (from Apr- 14 to Feb-15)	Estimate for FY 2014-15 (incl. projection for Mar-15)
	MU	MU
<b>HT Category</b>		
HT-I Industry	21,587	23,743
HT-II Commercial	1,831	2,008
HT-III Railways	1,314	1,433
HT-IV Public Water Works (PWW)	1,158	1,262
- HT Agriculture	662	724
- HT Poultry / Special AG	112	127
<b>HT-V Agricultural</b>	<b>774</b>	<b>850</b>
- HT Bulk Supply	176	192
- HT Group Housing	18	19
<b>HT-VI Bulk Supply</b>	<b>194</b>	<b>212</b>
HT-VIII Temporary Supply	5	5
HT-IX Public Services	725	799
HT-X Ports	66	82
HT MSPGCL AUX. SUPPLY	55	56

Category	FY 2014-15 Actuals for 11 months (from Apr- 14 to Feb-15)	Estimate for FY 2014-15 (incl. projection for Mar-15)
	MU	MU
<b>Total HT Category</b>	<b>27,708</b>	<b>30,450</b>
<b>LT Category</b>		
- BPL (0-30 Units)	94	103
- Consumption > 30 units per month	15,101	16,312
<b>LT-I Residential</b>	<b>15,194</b>	<b>16,415</b>
LT-II Non-Residential	3,450	3,737
LT-III Public Water Works	566	623
- AG: Un-metered Tariff	8,761	12,848
- AG: Metered Tariff(Including Poultry Farms)	9,821	14,445
<b>LT-IV Agriculture</b>	<b>18,582</b>	<b>27,293</b>
LT-V Industry	5,230	5,725
LT-VI Street Light	1,297	1,467
LT-VII Temporary Supply	16	18
LT-VIII Advertisements and Hoardings	3	3
LT-IX Crematorium and Burial Grounds	1	1
LT-X Public Services	168	187
LT-Prepaid	12	13
P.D. Consumers	-7	-9
<b>Total LT Category</b>	<b>44,513</b>	<b>55,472</b>
Credit Sales		
OA Sales		
<b>MSEDCL Sales (excluding DF)</b>	<b>72,221</b>	<b>85,922</b>
Consumer Sales in Distribution Franchisee Areas		<b>6,398</b>
<b>TOTAL Sales (including DF)</b>		<b>92,320</b>

- 3.2.12 Based on MSEDCL's additional submission, which factors in 11 months' actual sales data, the Commission observes that the total metered sale for HT category is 30,450 MU (as against 30,824 MU projected in the MYT Petition based on 6-month actual sales); and metered sales for LT category (excluding agriculture sales) is 28,179 MU (as against 28,402 MU projected in the MYT Petition based on 6-month actual sales). Thus, for FY 2014-15, total metered sales for HT as well as LT categories (excluding agriculture sales) have been reported to be marginally lower in the MSEDCL's additional submission based on 11 months (actual) as against that projected at the time of filing the Petition, which was based on 6 month actuals and 6 month projection.

- 3.2.13 However, there is a significant increase in estimation of agriculture sales, i.e., 27,293 MU (as against 21,565 MU) in the additional submission (based on 11-months' actuals) for metered as well as un-metered agriculture category. The increase in revised agriculture sales is 26.56%, as compared to reduction (-1.01%) in total sales, excluding Agriculture sales. This is summarized as under:

**Table 10: Comparison of FY 2014-15 Sales Projection by MSEDCL  
(Petition v/s Additional Submission)**

Particulars	FY 2014-15 as per Petition (6 months Actuals & 6 months projection)	FY 2014-15 (based on 11 months Actuals & 1 month projection)	Percentage change
	MU	MU	%
HT Sales	30,824	30,450	-1.21%
LT Sales (excluding LT Agricultural Sales)	28,402	28,179	-0.79%
<b>Total Sales (excluding LT Agricultural Sales)</b>	<b>59,226</b>	<b>58,629</b>	<b>-1.01%</b>
<i>LT Agricultural Sales – Metered</i>	<i>9,450</i>	<i>12,848</i>	<i>35.95%</i>
<i>LT Agricultural Sales – Un-metered</i>	<i>12,115</i>	<i>14,445</i>	<i>19.24%</i>
<b>Total LT Agricultural Sales</b>	<b>21,565</b>	<b>27,293</b>	<b>26.56%</b>
<b>Total Energy Sales (excluding DF)</b>	<b>80,791</b>	<b>85,922</b>	<b>6.35%</b>
Consumer Sales in Distribution Franchisee Areas	6,398	6,398	0.00%
<b>Total Sales (including DF)</b>	<b>87,189</b>	<b>92,320</b>	<b>5.89%</b>

- 3.2.14 Thus, there is a significant difference of 5,728 MU (26.56% increase) in Agricultural sales for FY 2014-15 as reported by MSEDCL in its MYT Petition vis-à-vis its additional submission. Upon enquiry regarding the reasons for the increase, MSEDCL has not substantiated it with any detailed reasoning, except that it is based on actual sales. The Commission is of the view that this requires detailed scrutiny of the assessment of agriculture sales. No significant increase in conversion of un-metered agriculture connections to metered connections and/or release of new agriculture connections has been reported during the second half of FY 2014-15 which could justify such a substantial increase.

- 3.2.15 Hence, the Commission has not accepted the agriculture sales reported by MSEDCL in its additional submission for FY 2014-15. Therefore, while approving sales for FY 2014-15, the Commission has worked out total sales based on the actual sales for 11 months for all categories, except agriculture. For agriculture sales, the Commission has considered the projections of MSEDCL in its Petition. The Commission directs MSEDCL to submit in its next tariff Petition, the reasons for such increase in agriculture consumption along with the Circle-wise number of agriculture consumers (metered/un-metered), connected load (metered/un-

metered), assessment of agriculture consumption Index, and agriculture sales (metered/un-metered) for FY 2013-14 and FY 2014-15. Accordingly, the category-wise Sales approved by the Commission for FY 2014-15 on a provisional basis are as summarised below:

**Table 11: Comparison of FY 2014-15 Sales (MU)**

Category	MSEDCL (Proj) under MYT Petition	MSEDCL Additional Submission based on 11 months Actuals	Approved (Provisional)
<b>HT Category</b>			
HT-I Industry	24,096	23,743	23,743
HT-II Commercial	2,102	2,008	2,008
HT-III Railways	1,428	1,433	1,433
HT-IV Public Water Works (PWW)	1,152	1,262	1,262
- HT Agriculture	737	724	724
- HT Poultry / Special AG	129	127	127
<b>HT-V Agriculture</b>	<b>865</b>	<b>850</b>	<b>850</b>
- HT Bulk Supply	191	192	192
- HT Group Housing	18	19	19
<b>HT-VI Bulk Supply</b>	<b>208</b>	<b>212</b>	<b>212</b>
HT-VIII Temporary Supply	4	5	5
HT-IX Public Services	825	799	799
HT-X Ports	74	82	82
HT MSPGCL AUX. SUPPLY	70	56	56
<b>Total HT Category</b>	<b>30,824</b>	<b>30,450</b>	<b>30,450</b>
<b>LT Category</b>			
<i>BPL (0-30 Units)</i>	<i>105</i>	<i>103</i>	<i>103</i>
<i>Consumption &gt; 30 units per month</i>	<i>16,514</i>	<i>16,312</i>	<i>16,312</i>
<b>LT-I Residential</b>	<b>16,618</b>	<b>16,415</b>	<b>16,415</b>
LT-II Non-Residential	3,786	3,737	3,737
LT-III Public Water Works	618	623	623
<i>AG: Un-metered Tariff</i>	<i>9,450</i>	<i>12,848</i>	<i>9,450</i>
<i>AG: Metered Tariff (Including Poultry Farms)</i>	<i>12,115</i>	<i>14,445</i>	<i>12,131</i>
<b>LT-IV Agriculture</b>	<b>21,565</b>	<b>27,293</b>	<b>21,582</b>
LT-V Industry	5,736	5,725	5,725
LT-VI Street Light	1,450	1,467	1,467
LT-VII Temporary Supply	17	18	18
LT-VIII Advertisements and Hoardings	3	3	3



Category	MSEDCL (Proj) under MYT Petition	MSEDCL Additional Submission based on 11 months Actuals	Approved (Provisional)
LT-IX Crematorium and Burial Grounds	2	1	1
LT-X Public Services	163	187	187
LT-Prepaid	14	13	13
P.D. Consumers	(5)	(9)	(9)
<b>Total LT Category</b>	<b>49,967</b>	<b>55,472</b>	<b>49,761</b>
Credit Sales			
OA Sales			
<b>MSEDCL Sales (excluding DF)</b>	<b>80,791</b>	<b>85,922</b>	<b>80,211</b>
Sales in Distribution Franchisee Areas	6,398	6,398	6,398
<b>MSEDCL Total sales</b>	<b>87,188</b>	<b>92,320</b>	<b>86,609</b>

### Sales for FY 2015-16

- 3.2.16 MSEDCL submitted that there has been a significant growth in the total sales in the last five years. This is primarily due to reduced load shedding and additional supply availability. Additional availability of power enabled uninterrupted supply of power to most consumers, and resulted in considerable increase in the consumption and, in turn, the sales of MSEDCL.
- 3.2.17 The sales in the initial six months of FY 2014-15 saw significant growth over the sales for same period of FY 2013-14, which has also prompted MSEDCL to project the sales with an optimistic view considering higher CAGR.
- 3.2.18 MSEDCL has estimated energy consumption for various customer categories primarily based on the CAGR trends during past years. Wherever it observed that the trend is unreasonable or unsustainable, the growth factors have been corrected to arrive at more realistic projections.
- 3.2.19 MSEDCL has considered FY 2013-14 sales as the base, and applied specified annual growth rates to arrive at the projected sales for FY 2015-16. The broad category-wise growth rates considered by MSEDCL are summarized in the Table below.

**Table 12: Growth rate considered by MSEDCL for FY 2015-16**

Consumer Category	Growth Rate considered
<b>HT Category</b>	
HT I Industry	7%

<b>Consumer Category</b>	<b>Growth Rate considered</b>
HT-II Commercial	7%
HT-III Railways	2%
HT-IV Public Water Works (PWW)	5%
HT-V Agricultural	15%
HT-VI Bulk Supply	0%
HT- Group Housing	0%
HT- Poultry / Special AG	15%
HT-VIII Temporary Supply	0%
HT-IX Public services	7%
HT-X Ports	0%
<b>LT Category</b>	
LT-I Residential	10%
LT-II Non-Residential	7%
LT-III Public Water Works	5%
LT-IV Agriculture	
AG: Un-metered Tariff	0%
AG: Metered Tariff (Including Poultry Farms)	7%
LT-V Industry	7%
LT-V Power Looms	9%
LT-VI Street Light	13%
LT-VII Temporary Supply	0%
LT-VIII Advertisements and Hoardings	0%
LT-IX Crematorium & Burial Grounds	0%
LT-X Public Services	7%

### ***Commission's Analysis***

- 3.2.20 The Commission approved MSEDCL's Business Plan in Case No. 134 of 2012 on 26 August, 2013. In its Order, the Commission had considered actual sales of FY 2012-13 as the base, applying certain growth rates to arrive at the projected sales for the MYT Control Period from FY 2013-14 to FY 2015-16. However, significant changes have taken place since the Business Plan Order. The actual sales recorded in FY 2013-14 were 85,631 MU (including DF sales), as against 91,192 MU in the Business Plan Order. The provisional sales for FY 2014-15, based on 11 months actual, also indicated a much wider gap vis-a-vis sales projected in that Order. As against the present estimated sales of 86,609 MU for FY 2014-15, the corresponding projection in the Business Plan Order was 98,443 MU. Clearly, there is a case to revisit the premise for sales projections for FY 2015-16 rather depending on the projections in the Business Plan Order.

- 3.2.21 In the light of the above, the Commission has adopted a different approach from that adopted in the Business Plan Order. Since the 11 months actual sales data for FY 2014-15 is available, the Commission has considered it (except LT agriculture sales) while estimating the provisional approved sales for FY 2014-15. Further, the Commission has considered the sales in FY 2014-15 rather than FY 2013-14 as the base, and applied the y-o-y growth rate for projecting sales in FY 2015-16. The Commission has taken into consideration the year on year sales growth of FY 2014-15 over FY 2013-14. The Commission has also corrected the growth factors, or considered MSEDCL's projection of sales in absolute terms for some categories on merits, to arrive at more realistic projections due to aberrations in the y-o-y growth rate reported in such categories. The growth rates considered by the Commission are discussed in the following paragraphs.

**HT-I Industry**

- 3.2.22 While the y-o-y growth rate for HT Industry works out to 6%, the Commission has considered a marginally higher rate of 7%, in view of the fact that revival of economic and industrial growth with increased availability of power is expected to reflect in higher growth rate of industrial consumption.

**HT-II Commercial**

- 3.2.23 The y-o-y growth rate for HT Commercial works out to 8%, which the Commission has considered for projecting sales in FY 2015-16.

**HT-III Railways**

- 3.2.24 While the y-o-y growth for Railways is stagnant, the 5-yr CAGR is 2%. The Commission has accepted MSEDCL's projection of sales to Railways for FY 2015-16.

**HT-IV Public Water Works**

- 3.2.25 The y-o-y growth rate for HT PWW works out to 10%, which the Commission has applied for projecting sales for FY 2015-16.

**HT-V Agriculture**

- 3.2.26 The y-o-y growth rate for HT Agriculture works out to 2%, and the Commission has considered it for projecting sales in FY 2015-16. Regarding HT Poultry and Special Agriculture category, the y-o-y growth rate is 36%, against which the Commission has decided to consider a normal growth rate of 5% for projecting sales for FY 2015-16.

**HT-VI Bulk Supply and Group Housing**

- 3.2.27 The y-o-y growth rate for this category is marginally negative. MSEDCL has projected a marginal increase in sales in FY 2015-16 over FY 2014-15. The Commission has decided to consider MSEDCL's projected sales for FY 2015-16 for this category.

**HT-VIII Temporary**

- 3.2.28 The y-o-y growth rate is minimal. MSEDCL has projected no growth in FY 2015-16 over FY 2014-15. Therefore, the Commission has decided to consider MSEDCL's projected sales for FY 2015-16 for this category.

**HT-IX Public Service**

- 3.2.29 The y-o-y growth rate for HT Public Service works out to 14%. The Commission has decided to consider a growth rate of 8%, as against MSEDCL's assumption of 7% for projecting sales for FY 2015-16.

**HT-X Ports**

- 3.2.30 The y-o-y growth rate for HT Ports works out to 123%. This is due to the fact that HT Ports category has been created only in August 2013 following the Commission's Order in Case No. 136 of 2012. Hence, the y-o-y growth rate is not a correct representation of the growth in the segment. Considering the recent actual sales data for 11 months of FY 2014-15, the Commission has decided to consider a growth rate of 5% for projecting sales in FY 2015-16.

**LT-I Domestic**

- 3.2.31 The y-o-y growth rate works out to 8%. The Commission has considered the same for projecting sales for FY 2015-16.

**LT-II Non- Domestic**

- 3.2.32 The y-o-y growth rate is 5%, which the Commission has considered for projecting sales in FY 2015-16.

**LT-III Public Water Works**

- 3.2.33 The y-o-y growth rate for this category works out to 6%, which the Commission has applied for projecting sales for FY 2015-16.

**LT-IV Agriculture**

- 3.2.34 The y-o-y growth rate for LT Agriculture un-metered sales works is negative (-5%), which is also in line with the projections of MSEDCL as no new connection is to be released in this category. Therefore, the Commission has also decided to apply a negative (-) 5% growth rate for projecting un-metered Agriculture sales for FY 2015-16. Regarding metered Agriculture sales, the y-o-y growth rate works out to 12%, as compared to MSEDCL's projection of 11%. The Commission has decided to consider MSEDCL's y-o-y growth rate of 11% for projecting metered Agricultural sales for FY 2015-16.

**LT-V LT Industrial**

- 3.2.35 While the y-o-y growth rate for LT Industrial – General Motive Power works out to 5%, the Commission has considered it at a marginally higher rate at 6%, since reviving economic and industrial growth with increased availability of power is expected to reflect in a higher growth rate of industrial consumption. Regarding the

LT Industrial – Powerloom sub-category (though it was not a separate sub-category prior to this Order, but data on which was maintained separately due to GoM subsidy), the y-o-y growth rate works out to 11%, which the Commission has decided to apply for projecting sales in FY 2015-16.

#### **LT-VI Street Light**

- 3.2.36 The y-o-y growth rate for LT Street Light is 16%. The Commission has decided to consider a growth rate of 10% as against MSEDCL's assumption of 13% for projecting sales for FY 2015-16.

#### **LT-VII Temporary Connection; LT-VIII Advertising and Hoardings; LT-IX Crematorium and Burial; LT-X Public Services and LT Prepaid**

- 3.2.37 The y-o-y growth rate for LT-X Public Services works out to 122%, against which the Commission has decided to consider MSEDCL's projected sales of 174 MU for FY 2015-16. For the remaining categories, which have relatively few consumers, the Commission has decided to accept MSEDCL's sales projection figures for FY 2015-16.

#### **Aurangabad DF**

- 3.2.38 Considering that the Aurangabad DF has been surrendered and MSEDCL has taken over the operations of the area from November 2014, the Commission has included category-wise sales projections pertaining to that area for FY 2015-16 in MSEDCL's sales.
- 3.2.39 Column-D of the following Table summarizes the sales projections approved by the Commission for FY 2015-16:

**Table 13: Approved Sales Projections for FY 2015-16 (in MU)**

Category	FY 2015-16 MSEDCL Petition	FY 2015-16 Approved for MSEDCL Area (excl. Aurangabad DF)	FY 2015- 16 Projection Aurangab ad DF	FY 2015-16 Approved
	A	B	C	D = B + C
<b>HT Category</b>				
HT-I Industry	25,707	25,405	958	26,362
HT-II Commercial	2,138	2,160	46	2,206
HT-III Railways	1,493	1,505	-	1,505
HT-IV Public Water Works (PWW)	1,270	1,383	10	1,393
- HT Agriculture	847	738	-	738
- HT Poultry / Special AG	148	133	0.5	133
<b>HT-V Agricultural</b>	<b>995</b>	<b>871</b>	<b>0.5</b>	<b>871</b>
- HT Bulk Supply	194	192	5	197
- HT Group Housing	20	19	0.2	20
<b>HT-VI Bulk Supply</b>	<b>214</b>	<b>212</b>	<b>5</b>	<b>217</b>

Category	FY 2015-16 MSEDCL Petition	FY 2015-16 Approved for MSEDCL Area (excl. Aurangabad DF)	FY 2015- 16 Projection Aurangab ad DF	FY 2015-16 Approved
	A	B	C	D = B + C
HT-VIII Temporary Supply	4	4	0.02	4
HT-IX Public Services	882	863	21	884
HT-X Ports	74	86	-	86
HT MSPGCL Aux. Supply	70	56		56
<b>Total HT Category</b>	<b>32,848</b>	<b>32,545</b>	<b>1,040</b>	<b>33,585</b>
<b>LT Category</b>				
LT-I Residential	18,304	17,728	404	18,132
LT-II Non-Residential	4,091	3,910	101	4,011
LT-III Public Water Works	649	660	1	661
- AG: Un-metered Tariff	8,976	8,980	3	8,982
- AG: Metered Tariff(Including Poultry Farms)	13,437	13,452	10	13,461
<b>LT-IV Agriculture</b>	<b>22,413</b>	<b>22,431</b>	<b>12</b>	<b>22,444</b>
LT-V Industry	6,209	6,141	145	6,286
LT-VI Street Light	1,613	1,613	19	1,632
LT-VII Temporary Supply	17	17	1	18
LT-VIII Advertisements and Hoardings	3	3	0.1	3
LT-IX Crematorium & Burial Grounds	2	2	-	2
LT-X Public Services	174	174	5	179
LT-Prepaid	14	14	-	14
P.D. Consumers	-	-	-	-
<b>Total LT Category</b>	<b>53,489</b>	<b>52,692</b>	<b>690</b>	<b>53,382</b>
Credit Sales		-		
OA Sales		-		
<b>MSEDCL Sales (excluding DF)</b>	<b>86,337</b>	<b>85,237</b>	<b>1,729</b>	<b>86,966</b>
<b>Sales in Distribution Franchisee Areas</b>	<b>6,980</b>		<b>5,250</b>	<b>5,250</b>
<b>Total Sales (incl. DF)</b>	<b>93,316</b>		<b>6,980</b>	<b>92,216</b>

### 3.3 Distribution Loss in FY 2013-14 to FY 2015-16

- 3.3.1 MSEDCL submitted that it has achieved a significant reduction in Distribution Losses during recent years. Although the efforts to reduce the Distribution Losses shall continue, loss reduction is a slow process and becomes increasingly difficult as the loss levels fall. MSEDCL has already achieved a Distribution Loss level of 14%, and further reduction at the rate considered in the Tariff Order may be difficult. Therefore, MSEDCL has assumed that the Distribution Loss will reduce

by 0.25% per year in FY 2014-15 and FY 2015-16, i.e. a level of 14% in FY 2013-14, 13.75% in FY 2014-15 and 13.50% in 2015-16.

***Commission's Analysis***

- 3.3.2 In its Business Plan Order, the Commission had approved targets for Distribution Loss for FY 2013-14, FY 2014-15 and FY 2015-16 of 15.03%, 14.53% and 14.03%, respectively.
- 3.3.3 For the purpose of approval of Distribution Loss for FY 2013-14, the Commission has considered the difference between approved sales of 85,631 MU and the energy input of 99,575 MU at the MSEDCL distribution periphery. The Commission has verified these figures vis-a-vis the Audited Annual Account statements for FY 2013-14 as well as the State-wide energy account statement provided by MSLDC. Accordingly, the Commission approves the actual Distribution Loss of 14% claimed by MSEDCL, which is lower than the Business Plan Order target of 15.03%. However, as elaborated subsequently in this Order, the Commission has observed that there is a significant variation in the un-metered agriculture consumption, which would have a bearing on overall energy accounting and loss reporting. Therefore, the Commission has directed MSEDCL to submit detailed account of the Circle-wise/Division-wise computation of Index for un-metered agriculture consumption from FY 2013-14 onwards. Upon scrutiny of the same, the Distribution Loss can be more credibly ascertained. Hence, the Commission has not considered the sharing of gains pertaining to Distribution Loss at this stage. The Commission notes that MSEDCL has also not claimed incentive on this account.

**Table 14: Approved Distribution Losses for FY 2013-14**

Particular	FY 2013-14	
	MSEDCL	Approved
Distribution Loss	14.00%	14.00%

- 3.3.4 As regards Distribution Loss for FY 2014-15 and FY 2015-16, the Commission notes that MSEDCL has projected lower losses as compared to the targets approved in the Business Plan. The Commission has considered these lower levels of Distribution Loss, i.e. 13.75% for FY 2014-15 and 13.50% for FY 2015, for the assessing the energy input requirement for these years.

**Table 15: Approved Distribution Losses for FY 2014-15 and FY 2015-16**

Particular	FY 2014-15			FY 2015-16		
	Business Plan Order	MSEDCL	Approved	Business Plan Order	MSEDCL	Approved

Particular	FY 2014-15			FY 2015-16		
	Business Plan Order	MSEDCL	Approved	Business Plan Order	MSEDCL	Approved
Distribution Loss	14.53%	13.75%	13.75%	14.03%	13.50%	13.50%

3.3.5 However, for the purpose of truing up at the end of the Control Period, the actual Distribution Loss levels would be ascertained and be trued up vis-à-vis the targets approved under the Business Plan Order.

### 3.4 Energy Balance for FY 2013-14 to FY 2015-16

3.4.1 MSEDCL has computed the Energy Balance based on the availability of power, sales forecast and projected Transmission and Distribution Losses for the Control Period.

3.4.2 While calculating the Energy Balance of MSEDCL as a whole, in the overall sales of MSEDCL the sale to the consumers of the DF area have been considered, instead of the sales at input level to the DF.

3.4.3 MSEDCL submitted that it is procuring power from various sources, including MSPGCL, RGPPL, the Central sector Generators including nuclear power plants, Traders, CPPs and NCE. These sources are both within and outside Maharashtra. MSEDCL procures power from Central Generating Stations located in Western, Eastern and Northern Regions. It is very difficult to differentiate which power is coming from which source at the Transmission periphery. Hence, applying individual Inter-State Transmission Losses for each Station would give a distorted picture. Therefore, the average Inter-State Loss is considered for the whole year for power sourced from outside Maharashtra.

3.4.4 MSEDCL also submitted that it has considered the metered energy at bus-bar of the generating Station, metered energy at T <math>\leftrightarrow</math> D interface, i.e. at Distribution Periphery, and metered sales at the consumer end. The normative losses of MSEDCL have been taken as the Intra-State Loss, and the balance considered as Inter-State Loss. Thus, Inter-State loss is a derived figure. MSEDCL has considered Intra-State Transmission Loss of 4.08% for FY 2014-15 and FY 2015-16, as approved by the Commission in its Order dated 14 August, 2014 in Case No. 123 of 2014.

3.4.5 Based on the Power Procurement Plan for FY 2014-15 and FY 2015-16 and projected sales, and considering Inter-State Transmission Loss in the range of 5% to 6%, MSEDCL has projected the remaining power to be available for trading, and accordingly calculated the Energy Balance. Energy Balance of MSEDCL for FY 2013-14 to FY 2015-16 is shown in the following Table.



**Table 16: Energy Balance for FY 2013-14 to FY 2015-16 as submitted by MSEDCL**

Particulars	Units	FY 2013-14 (actual)	FY 2014-15 (Est.)	FY 2015-16 (Est.)
<b>Purchase within Maharashtra</b>				
Purchase from MSPGCL	MU	41,336	44,398	51,087
NPCIL Tarapur	MU	3,865	4,530	4,500
Purchases from other sources and Medium-term	MU	21,881	31,247	39,519
Traders	MU	1,697	1,952	
IBSM + FBSM	MU	(1,232)	57	
Other power on MSEDCL Network	MU	4,459		-
Infirm Power	MU	570		
<b>Total Purchase within Maharashtra</b>	<b>MU</b>	<b>72,576</b>	<b>82,184</b>	<b>95,105</b>
<b>Purchase outside Maharashtra</b>				
Central Generating Station +NPCIL+ UMPP + Case I + Sardar Sarovar + Pench+ Banking	MU	32,568	32,264	34,563
<b>Total Purchase outside Maharashtra</b>	<b>MU</b>	<b>32,568</b>	<b>32,264</b>	<b>34,563</b>
Inter State Transmission Loss	MU	5.53%	5.16%	5.07%
Total Purchase at Maharashtra periphery	MU	30,768	30,600	32,811
Total Power Purchase Payable	MU	1,05,145	1,14,448	1,29,669
<b>Total Purchase available at Transmission Periphery</b>	<b>MU</b>	<b>1,03,344</b>	<b>1,12,783</b>	<b>1,27,916</b>
<b>Energy Available at Distribution Periphery</b>				
Intra-State loss	%	4.08%	4.08%	4.08%
Energy at Distribution Periphery injected (above 33 kV)	MU	99,128	1,08,182	1,22,697
Energy at Distribution Periphery injected and drawn (33 kV and below)	MU	447	447	447
Energy at Distribution Periphery	MU	99,575	1,08,629	1,23,144
Distribution Losses	%	14.00%	13.75%	13.50%
Distribution Losses	MU	13,944	14,940	16,628
<b>Energy Available for Sale</b>	<b>MU</b>	<b>85,631</b>	<b>93,689</b>	<b>1,06,516</b>
Retail Energy Sale to Consumers	MU	85,631	87,189	93,316
<b>Surplus Energy Available for Trading</b>	<b>MU</b>	<b>484</b>	<b>6,500</b>	<b>13,200</b>

**Commission's Analysis****Approved Energy Balance for FY 2013-14**

3.4.6 The Energy Balance reported by MSEDCL and approved by the Commission for FY 2013-14 is presented in the Table below. The difference in Energy Balance

claimed by MSEDCL and that approved by the Commission is to the extent of the actual Intra-State losses based on the FBSM statement for Maharashtra, which amounts to 4.09% against 4.08% claimed by MSEDCL for FY 2013-14, along with consideration of net surplus energy traded reported as 484 MU at the Transmission periphery. The Inter-State Losses arrived at in the Energy Balance are consequent to the above changes.

**Table 17: Energy Balance for FY 2013-14 as approved by Commission**

Particulars	Units	FY 2013-14	
		MSEDCL	Approved
<b>Purchase within Maharashtra</b>			
Purchase from MSPGCL	MU	41,336	41,336
NPCIL Tarapur	MU	3,865	3,865
Purchases from other sources and Medium-term	MU	21,881	21,881
Traders	MU	1,697	1,697
IBSM + FBSM	MU	(1,232)	(1,232)
Other power on MSEDCL Network	MU	4,459	4,459
Infirm Power	MU	570	570
<b>Total Purchase within Maharashtra</b>	<b>MU</b>	<b>72,576</b>	<b>72,576</b>
<b>Purchase outside Maharashtra</b>			
Central Generating Station +NPCIL+ UMPP + Case I + Sardar Sarovar + Pench+ Banking	MU	32,568	32,568
<b>Total Purchase outside Maharashtra</b>	<b>MU</b>	<b>32,568</b>	<b>32,568</b>
Inter State Transmission Loss	MU	5.53%	4.01%
Total Purchase at Maharashtra periphery	MU	30,768	31,262
Total Power Purchase Payable	MU	1,05,145	1,05,145
Surplus Energy Traded	MU		(484)
<b>Total Purchase available at Transmission Periphery</b>	<b>MU</b>	<b>1,03,344</b>	<b>1,03,355</b>
<b>Energy Available at Distribution Periphery</b>			
Intra-State loss	%	4.08%	4.09%
Energy at Distribution Periphery injected (above 33 kV)	MU	99,128	99,128
Energy at Distribution Periphery injected and drawn (33 kV and below)	MU	447	447
Energy at Distribution Periphery	MU	99,575	99,575
Distribution Losses	%	14.00%	14.00%
Distribution Losses	MU	13,944	13,944
<b>Energy Available for Sale</b>	<b>MU</b>	<b>85,631</b>	<b>85,631</b>
Retail Energy Sale to Consumers	MU	85,631	85,631
<b>Surplus Energy Available for Trading</b>	<b>MU</b>	<b>484</b>	<b>-</b>

### Approved Energy Balance for FY 2014-15

- 3.4.7 For projecting the Energy Balance of FY 2014-15, MSEDCL has adopted a top-down approach. It has considered the energy share from all the power sources it has tied up as available for MSEDCL to cater to projected sales, after accounting

for Inter-State loss, Intra-State loss and Distribution Loss. The excess energy available after catering to the projected consumer sales has been considered by MSEDCL as available for trading. Accordingly, MSEDCL has projected 6500 MU as surplus power, which is around 7% of total projected power purchase for FY 2014-15.

- 3.4.8 The Commission is of the view that the Energy Input requirement will have to be arrived at based on a bottom-up approach. The quantum of sales to consumers has to be projected first. This energy requirement is to be grossed up for Distribution Loss, Intra-State loss and Inter-State loss to arrive at the actual quantum of energy input that needs to be procured from the various generating Stations.
- 3.4.9 The Commission has approved sales of 86609 MU for FY 2014-15, comprising sales of 6398 MU in Distribution Franchisee Areas and 80211 MU in the rest of the MSEDCL area. Besides, the Commission has considered the Distribution Loss level of 13.75% as claimed by MSEDCL. As regards Intra-State losses, the Commission has considered the actual loss levels of FY 2014-15 of 3.89% as per the State-wide Energy Account Balance from MSLDC, as against 4.08% claimed by MSEDCL. As regards Inter-State losses, the Commission has considered the average of weekly losses published by WRLDC during FY 2014-15, which works out to 3.79% as against 5.16% claimed by MSEDCL.
- 3.4.10 As regards the surplus energy projected for trading, the Commission had sought details of actual traded power during FY 2014-15. MSEDCL submitted the following details of actual surplus power traded till November 2014.

**Table 18: Details of actual surplus power traded in FY 2014-15, as submitted by MSEDCL**

Month	IEX		PXIL		BEST	
	MU	Rate (Rs./Unit)	MU	Rate (Rs./Unit)	MU	Rate (Rs./Unit)
Apr-14	2.4	2.37	-	-	-	-
May-14	10.25	2.44	-	-	-	-
Jun-14	32.43	2.41	0.11	3.18	-	-
Jul-14	59.98	2.64	2.11	3.67	52.25	2.99
Aug-14	59.82	3.23	6.6	3.64	42.18	2.99
Sep-14	31.45	3.04	0.75	2.71	1.73	3
Oct-14	1.2	2.37	0	0	0	0
Nov-14	59.3	2.1	0	0	0	0
<b>Total</b>	<b>256.83</b>	<b>2.66</b>	<b>9.57</b>	<b>3.57</b>	<b>96.15</b>	<b>2.99</b>

- 3.4.11 Subsequently, MSEDCL submitted the latest status of traded surplus power as on January, 2015 as 542.55 MU. In the absence of traded power data for the whole

year, the Commission has estimated it on pro rata basis, which works out to 651 MU for FY 2014-15. Thus, estimated power traded during FY 2014-15 is far lower than the 6500 MU of surplus traded power projected by MSEDCL. The Commission notes that, despite projecting surplus tradable power in FY 2014-15, MSEDCL has applied load shedding in various pockets, which is contrary to the objective of meeting all the energy requirement of its Licence area, and at the same time exploring trading of surplus power (if available).

- 3.4.12 Accordingly, the Commission has adopted a bottom up approach, with grossing up of sales by approved loss levels (viz. Distribution Loss, Intra-State Transmission loss and Inter-State Transmission loss) to arrive at the Energy Input requirement for FY 2014-15. For approval of Energy Balance for FY 2014-15, the Commission has segregated the total energy input requirement of 1,05,945 MU into Inter-State purchase and Intra-State purchase by applying the ratio of actual purchases from such sources during FY 2013-14. However, the Commission will further scrutinize the actual power purchase from such sources during the truing up of FY 2014-15.
- 3.4.13 In view of the above, the Commission approves the following Energy Balance for FY 2014-15:

**Table 19: Energy Balance for FY 2014-15 as approved by Commission**

Particulars	Units	Approved
Retail Energy Sale to Consumers	MU	86,609
<i>Distribution Losses</i>	%	13.75%
<i>Distribution Losses</i>	MU	13,807
<i>Energy at Distribution Periphery</i>	MU	1,00,416
<i>Energy at Distribution Periphery injected and drawn at 33 kV</i>	MU	447
<i>Energy at Distribution Periphery injected from 33 kV and above</i>	MU	99,969
<i>Intra-State Loss</i>	%	3.89%
Total Energy required at Transmission Periphery	MU	1,04,015
<i>Surplus Energy Traded</i>	MU	651
<i>Total Power Purchase Quantum Payable</i>	MU	1,04,666
Power Purchase Quantum from Intra-State sources	MU	72,246
Power Purchase Quantum from Inter-State sources at Maharashtra Periphery	MU	32,420
Inter-State losses	%	3.79%
Power Purchase Quantum from Inter-State sources	MU	33,698
<b>Total Power Purchase Quantum Payable</b>	<b>MU</b>	<b>1,05,945</b>

**Energy Balance for FY 2015-16 (approved)**

- 3.4.14 For projecting the Energy Balance of FY 2015-16, MSEDCL has adopted a top-down approach. It has considered energy available from all the power sources it has tied up for catering to its projected sales, after accounting for Inter-State loss, Intra-State loss and Distribution Loss. The excess energy available after catering to projected consumer sales has been considered as available for trading. Accordingly, MSEDCL has projected 13200 MU as surplus power, which amounts around 10% of the total power purchase quantum projected for FY 2015-16.
- 3.4.15 The Commission is of the view that the Energy Input requirement should be based on a bottom-up approach. The quantum of sales to consumers has to be projected first. This energy requirement should form the basis for further grossing up for Distribution Loss, Intra-State loss and Inter-State loss to arrive at the actual energy input requirement that needs to be procured.
- 3.4.16 The Commission has approved sales of 92216 MU for FY 2015-16, comprising sales of 5250 MU in the DF areas and 86966 MU in the remaining MSEDCL area. The Commission has considered a Distribution Loss level of 13.50% for its area, as claimed by MSEDCL. Sales within the Aurangabad Franchisee area have been considered as part of MSEDCL's sales for the purpose of projections. As regards Intra-State losses, the Commission has considered the actual loss levels of FY 2014-15 of 3.89% from the MSLDC State-wide energy account, as against 4.08% claimed by MSEDCL. As regards Inter-State losses, the Commission has considered the average of weekly losses published by WRLDC during FY 2014-15, which works out to 3.79% as against 5.16% claimed by MSEDCL.
- 3.4.17 As against the the projection of surplus traded power of 13200 MU, the Commission has not considered any trading of surplus power during FY 2015-16 for the reasons set out in earlier paragraphs. The Commission also notes that, in its additional submission subsequent to the Public Hearing, MSEDCL has stated that no surplus power has been considered for trading in FY 2015-16.
- 3.4.18 In view of the above, the Commission approves the following Energy Balance for FY 2015-16.

**Table 20: Energy Balance for FY 2015-16 as approved by Commission**

Particulars	Units	Approved
Retail Energy Sale to Consumers	MU	92,216
<i>Distribution Losses</i>	%	13.50%
<i>Distribution Losses</i>	MU	14,392
<i>Energy at Distribution Periphery</i>	MU	1,06,608
<i>Energy at Distribution Periphery injected and drawn (33 kV and below)</i>	MU	447
<i>Energy at Distribution Periphery injected (above 33</i>	MU	1,06,161

Particulars	Units	Approved
kV)		
<i>Intra-State Loss</i>	%	3.89%
Total Energy required at Transmission Periphery	MU	1,10,458
<i>Surplus Energy Traded</i>	MU	-
<i>Total Power Purchase Quantum Payable</i>	MU	1,10,458
Power Purchase Quantum from Intra-State sources	MU	81,255
Power Purchase Quantum from Inter-State sources at Maharashtra Periphery	MU	29,203
Inter-State losses	%	3.79%
Power Purchase Quantum from Inter-State sources	MU	30,355
<b>Total Power Purchase Quantum Payable</b>	<b>MU</b>	<b>1,11,609</b>

### 3.5 Power purchase from FY 2013-14 to FY 2015-2016

3.5.1 MSEDCL has estimated the power purchase expenses for FY 2013-14, FY 2014-15 and FY 2015-16 at Rs. 33,922 Crore, Rs 41,181 Crore and Rs 45,085 Crore respectively. The primary sources of power procurement are as under:

- MSPGCL
- Central Generating Stations
- Ratnagiri Gas and Power Private Ltd.
- JSW (Ratnagiri) Energy Ltd.
- Mundra UMPP (CGPL)
- Adani Power Ltd.
- EMCO Energy Ltd.
- India Bulls Power Ltd. (now 'RattanIndia Power Ltd.')

3.5.2 In addition, MSEDCL buys power from trading companies, Power Exchanges and other sources such as Hydro power Stations, including SSP, Pench, Dodson, and Non-Conventional energy sources such as co-generation, Wind power and surplus power from CPPs.

3.5.3 MSEDCL procures power from different sources on MOD principles. However, considering the present power situation, it has considered the entire power available from all sources so to meet the demand to the extent possible.

### 3.6 Power Purchase Expenses in FY 2013-14

3.6.1 For FY 2013-14, MSEDCL has considered power purchase expenses based on actual generation and actual monthly Fixed Charges and Variable Charges.

MSEDCL has provided detailed information on source-wise power procurement quantum and cost. It has clarified that power procurement from small Hydro generation sources from MSPGCL has been included as a part of MSPGCL generation, whereas small private Hydro Generators (i.e., Dodson I and II) have been reported separately.

MSEDCL's submission on source-wise power purchase quantum and cost for FY 2013-14 is summarised in the following paragraphs.

MSPGCL

- 3.6.2 MSEDCL has considered power purchase from MSPGCL Stations based on actual generation in FY 2013-14. The power procurement from Bhusawal Unit 5 has been considered as infirm power for the period from April, 2013 till its COD was achieved on 3 January, 2014. Thereafter, the generation from Bhusawal Unit 5 has been considered as firm generation on actual basis. The power purchase cost for MSPGCL Stations has been considered as per audited Annual Accounts.

Central Generating Stations (CGS)

- 3.6.3 *NTPC:* In case of power procurement from NTPC, MSEDCL has firm share allocation of power in the CGS as per Central Government policy. In addition, most of the CGS have 15% unallocated power which is distributed among the regional constituents. However, the share allocation available to MSEDCL from Eastern Region CGS (except Kahalgaon II) has been discontinued from September, 2010 as per notice dated 30 September, 2010. As such, power is not available to MSEDCL from Farrakka, Talcher and Kahalgaon I Stations of NTPC.
- 3.6.4 In July, 2011, CERC has approved the tariff for various NTPC Stations for FY 2009-10 to 2013-14. MSEDCL has considered the actual Fixed Charges paid to CGS on the basis of CERC Orders issued in July, 2011 for FY 2013-14, considering the actual availability of such CGS. Actual variable charges have been considered for FY 2013-14, and hence no fuel price adjustment has been provided.
- 3.6.5 *NPCIL:* In case of NPCIL, actual generation from nuclear power projects has been considered for FY 2013-14 at a cost of Rs.1,213 Crore (including Income Tax), with average rate of Rs. 2.41 per kWh.
- 3.6.6 *Sardar Sarovar Project (SSP) and Pench:* MSEDCL has considered actual power purchase from SSP and Pench for FY 2013-14 at the prevailing rate of Rs 2.05 per kWh. MSEDCL submitted that this rate would prevail until such time a GoM claims any additional tariff for them.
- 3.6.7 *Dodson I and II, Wind and Co-generation Projects:* MSEDCL has been entering into PPAs with all the Generators of renewable sources who are approaching it so as to meet its RPO requirement. It has considered the actual generation from RE sources for FY 2013-14. MSEDCL has purchased 86 MU from Dodson I and II. In case of Dodson-II, the Annual Fixed Cost of Rs 15.12 Crore, as approved by the Commission in Case No. 105 of 2009, has been considered. In addition, the water

- cess and incentives paid in FY 2013-14 have also been considered for Dodson II. For Dodson I, the average rate works out to Rs. 2.59 per kWh for FY 2013-14.
- 3.6.8 *JSW Energy Ltd.:* MSEDCL has entered into a long-term agreement with JSW Energy Ltd. for purchase of 300 MW power from its Jaigad (Ratnagiri Distt.) power plant. The actual units and cost using CERC escalation Index for AFC and Variable Charges for FY 2013-14 for the respective periods has been considered.
- 3.6.9 *Ratnagiri Gas and Power Pvt. Ltd. (RGPPL):* As per GOI guidelines, 5% share from RGPPL is allocated to Goa, Daman and Dadra & Nagar Haveli. Hence, 95% of the capacity of RGPPL, as envisaged in the PPA, has been considered. However, owing to acute gas shortage, MSEDCL has purchased 1,438 MU in FY 2013-14. Initially, the Fixed Cost was considered as per the CERC Order dated 18 August, 2010 on pro rata basis. Subsequently, RGPPL has supplied power inconsistently. Hence, MSEDCL has treated this as infirm power and not agreed to pay Fixed Charges and take-or-pay charges claimed by RGPPL. Actual Energy Charge has been considered for FY 2013-14. The reimbursement of taxes and partly paid WRLDC fees have also been included in the cost. MSEDCL has also provided advance of Rs 179.15 Crore to RGPPL. RGPPL has filed a Petition before CERC for full recovery of Fixed Charges. Thereafter, MSEDCL had filed a Petition before the Supreme Court. The Supreme Court did not grant any stay, but directed that the case may be heard by ATE on merits. MSEDCL has preferred an appeal before ATE against the CERC Order dated 30th July, 2013.
- 3.6.10 *CGPL UMPP Mundra:* MSEDCL has entered into an agreement with Coastal Gujarat Power Ltd. (CGPL) for power procurement from Mundra UMPP, and has been allocated 800 MW (20% share) power. The first Unit of 800 MW was commissioned in March, 2012 and the remaining in 2013-14. MSEDCL has considered the actual power procurement and power purchase cost in FY 2013-14. The Fixed and Energy Charges have been considered as per the PPA price schedule after applying CERC escalation indices for the respective periods. MSEDCL is not in agreement with the compensatory tariff as approved by CERC, and has hence filed an appeal against its Order before the ATE. Recently, the Supreme Court stayed the interim Order of the ATE on compensatory tariff, and asked ATE to finalise the matter expeditiously. Accordingly, MSEDCL has not considered the impact of compensatory charges. It requested the Commission to consider the impact of the same when the final Order is issued.
- 3.6.11 *Adani Power Ltd.:* MSEDCL has entered into agreement with Adani Power Ltd. for purchase of 1320 MW under Case 1 stage 1 bidding and 1325 MW (1200 MW + 125 MW) power under Case 1 stage 2 bidding from its Tiroda Station, Maharashtra. Unit 2 of 600 MW was commissioned on 30 March, 2013 and Unit 3 of 660 MW on 14 June, 2013. The power from Unit 1 of 600 MW has commenced from October, 2013, against the PPA quantum of 1200 MW. Hence, the power procurement has been considered for 6 months, i.e. October, 2013 to March, 2014. The rate for procurement of 1320 MW has been considered as Rs 2.55 /kWh as per



the PPA, whereas the cost of Unit 1 power of 600 MW has been considered as per the PPA price schedule and applying the CERC escalation factor. MSEDCL as well as Adani Power have filed various Petitions/Appeals (on account of change in law and other matters) before various forums regarding payment of compensatory charges/other charges, and the matters are sub judice. Therefore, MSEDCL has not considered the impact of compensatory tariff. Its impact may be considered whenever the final Order in the matter is issued.

- 3.6.12 *India Bulls Power Ltd.:* MSEDCL has executed a long-term PPA with India Bulls Power Ltd. for 1200 MW (450 + 750 MW) from its Amravati Plant. The COD of unit 1 was July, 2013 and subsequently power has been supplied to MSEDCL. The quantum of energy units and power purchase cost has been considered at actuals for FY 2013-14. MSEDCL as well as India Bulls Power Ltd. have filed various Petitions (change of law and other matters) before the Commission regarding payment of compensatory charges/other charges, which are sub judice. Accordingly, MSEDCL has not considered the impact of such Petitions. MSEDCL requested the Commission to consider the impact whenever the final Orders are issued.
- 3.6.13 *EMCO Energy Ltd.:* MSEDCL has entered into a long-term PPA with EMCO Energy Ltd. for 200 MW from its 600 MW Warora Plant. The cost of power purchase has been considered for one month in March, 2014 as per the PPA price schedule by applying the CERC Index for escalation of Fixed Cost and Energy Charges. EMCO has filed a Petition for change in law before CERC for Transmission Losses and charges, which is sub judice. Accordingly, MSEDCL has not considered the impact of such change in law and other costs. MSEDCL has requested the Commission to consider their impact whenever the final Order in this matter is issued.
- 3.6.14 *Power Purchase from Traders and FBSM:* In case of any shortfall in energy available from the above sources, MSEDCL had to resort to power purchase from Traders or any other sources available at the prevailing market prices. MSEDCL has considered power purchase from Traders as per actuals. The FBSM Account under Intra-State ABT has been implemented with from August, 2011, following which the regional UI allocated to MSEDCL has now been allocated to State Pool Participants. Based on this and under/ over-drawal and injection in the State, the net Pool Imbalance Charges are calculated by the Maharashtra State Power Committee (MSPC). Hence, the actual Pool Imbalance Units and amount has been considered. The additional UI charges paid by MSEDCL for over-drawal are Rs 9.52 Crore in FY 2013-14, based on the bills raised.
- 3.6.15 *Transmission Charges:* PGCIL Transmission Charges are considered at actuals for FY 2013-14.

**Table 21: Source-wise break-up of power purchase cost for FY 2013-14**

Sr. No.	Particulars	Projected by MSEDCL		
		Net units sent out for MSEDCL (MU)	Total cost (Rs. Crore)	Per unit rate (Rs./ kWh)
1	MSPGCL	41,336	14,862	3.60
2	NTPC	24,821	6,783	2.73
3	NPCIL	5,033	1,213	2.41
4	SSP	1,539	316	2.05
5	Pench	131	27	2.05
6	RGPPL	1,438	470	3.27
7	Dodson	86	27	3.10
8	JSW	1,978	614	3.10
9	Adani Power	9,593	2,736	2.85
10	Mundra UMPP	4,908	1,220	2.49
11	India Bulls Power	1,034	334	3.23
12	NCE	6,409	3,347	5.22
13	CPP	1,274	377	2.96
14	EMCO Energy	69	19	2.71
15	Traders	1,697	525	3.09
16	Others	(1,232)	1,055	
	<b>TOTAL</b>	<b>100,115</b>	<b>33,922</b>	<b>3.39</b>

***Commission's Analysis***

- 3.6.16 In reply to a query by the Commission regarding other charges and supplementary bills mentioned in its power purchase computation, MSEDCL submitted that they include charges other than Capacity and Energy Charges, such as interest, insurance, ULDC, RLDC and NLDC charges, Water Cess, ED – Cess, Cess – CVD, etc. The bills pertaining to the previous financial year or revision of bills, passed for payment in the current financial year, are covered under supplementary bills.
- 3.6.17 As sought by the Commission, MSEDCL submitted details and supporting documents with regard to other charges and supplementary bills. The break-up of supplementary bills towards MSPGCL, as submitted by MSEDCL in its reply, is tabulated as below:

**Table 22: Break-up of Supplementary Bills by MSPGCL for FY 2013-14 (Rs Crore)**

Particulars	Amount
Infirm power bill for Khaparkheda Unit 5 as per MERC Order dated 4 September, 2013 for Rs. 28.05 Crore and Rs. 71.27 Crore ,out of which Rs. 46.31 Crore provision made in March 13 and balance provision made in 2013-14	53.01
Khaparkheda Unit 5 Fixed Charges difference for FY 2013-14 (April 13 to August 13) as per MERC Order Dated 4 September, 2013	30.83
Pro rata reduction in Energy Charges and FAC as per MSPGCL corrigendum Order dated 19 March, 2014	-36.65
Infirm power for Bhusawal Unit 5	27.21
<b>Total</b>	<b>74.40</b>

3.6.18 As the quantum of bills for all generating Stations is voluminous, MSEDCL submitted sample bills for each component. The Commission has verified the sample bills and found them to be in order.

3.6.19 As regards the cost of power purchase from MSPGCL for FY 2013-14, the Commission observed that the accounting head under which these expenses were booked by MSEDCL and the corresponding revenue booked by MSPGCL in their respective Audited Accounts did not tally. MSEDCL was asked to submit the reconciliation statement. The following Table summarises the reconciliation statement provided by MSEDCL.

**Table 23: Reconciliation of expenses on power purchase from MSPGCL for FY 2013-14 (Rs Crore)**

	Particulars	Amount
	Sale to MSEDCL as per MSPGCL Audited Account	16,006.25
Add:	Infirm Power of Bhusawal Unit No.5 booked in FY 2013-14 in the books of MSEDCL, whereas it is booked in FY 2012-13 in the books of MSPGCL as reduction to capital work in progress	27.21
Add:	Revision of Energy Charges of Khaperkheda Unit No. 5 for March 2013 considered in FY 2012-13 in the books of Mahagenco	-0.02
Less:	Energy Charges short booked by MSEDCL 2013-14 for Bhusawal unit no. 4 of Rs 51, 431/- and for Koradi of Rs 3,46,835/-	0.04
Less:	Impact of MERC Order nos. 28 & 44 for Paras unit no.4, Parli unit no.7 as revision in Fixed Charges. Further revision in Variable Charges on account of acceptance of Bunkered Coal GCV by MERC and acceptance of revised Fixed Charges and Variable Charges of Khaperkheda unit no. 5 considered in FY 2012-13 in the books of MSEDCL	907.89
Less:	Withdrawal of Hydro incentive & Fuel adjustment charges has not	-7.34

	Particulars	Amount
	been considered by MSEDCL in its purchase	
Less:	Solar 1 MW and 125 MW sale considered as non-conventional purchase by MSEDCL	270.91
	<b>Power purchase cost as per MSEDCL Audited Accounts</b>	<b>14,861.93</b>

- 3.6.20 *Renewable Purchase Obligation for FY 2013-14:* As per the RPO-REC Regulations, 2010, each Distribution Licensee is required to meet 9% of its requirement through RE sources in FY 2013-14, including 0.50% through Solar sources and 0.1% through mini/micro Hydro sources. The Commission had sought details of RPO along with source-wise break-up of energy procured by MSEDCL. The Commission has separately initiated proceedings for verification of compliance of RPO targets by MSEDCL for FY 2013-14 in Case No. 190 of 2014. In those proceedings, the Commission will issue necessary directives in accordance with the Regulations.
- 3.6.21 The Commission has verified the source-wise power purchase cost and reconciled it with the Audited Accounts for FY 2013-14. Accordingly, the Commission approves the net power purchase expenses of Rs. 33,922 Crore as submitted by MSEDCL.

**Table 24: Power purchase expenses for FY 2013-14 (Rs. Crore)**

Particulars	Actual	Approved
Power Purchase Expenses	33,922	33,922

### 3.7 Power Purchase Expenses for FY 2014-15

- 3.7.1 For power purchase projections for FY 2014-15, MSEDCL has considered actual purchase quantum and costs up to September, 2014, and projected energy availability for the remaining period of FY 2014-15. MSEDCL has considered expected upcoming projects and the information on availability of sources of generation. The methodology adopted by MSEDCL for source-wise projection of power purchase quantum and cost for FY 2014-15 is given below:
- 3.7.2 *MSPGCL:* The power purchase from MSPGCL has been considered as per actuals up to September, 2014. From October, 2014 to March, 2015, energy units are calculated using actual PLF for FY 2013-14 or 40%, whichever is higher, considering the actual plant capacity of the existing Stations. For generating Stations whose PLF is more than 80% in FY 2013-14, MSEDCL has considered the PLF as 80%, as per the Commission's Order dated 3 March 2014.
- 3.7.3 Fixed Charges have been considered as per the corrigendum Order in Case No. 54 of 2013 dated 19 March 2014, after pro rata reduction for existing Stations. The

- Station-wise approved Variable Charges have been considered. FAC has been considered at actuals upto September, 2014 and FAC cost of Rs 1500 Crore has been estimated for the remaining period of FY 2014-15.
- 3.7.4 *NTPC*: Generation from NTPC Stations has been considered as per actuals upto September, 2014. For projection upto March, 2015, PL of 83% has been considered for thermal generating Stations as per CERC Tariff Regulations, 2014. For the new generating Station at Mauda (Distt. Nagpur), projections have been made as per the Commission's Order in Case No. 134 of 2012 for the Business Plan. MSEDCL submitted that the Commission has considered allocation of energy from Barh and N. Karanpura in that Order. However, as per its recent submission, no energy is allocated to it, and has hence not been considered. Generation from Gas Stations has been estimated considering past trends.
- 3.7.5 As regards power purchase cost, Fixed Charges have been projected with 5% increase over FY 2013-14, after considering the actual purchase for April to September, 2014. The Variable Charges have been considered as per actuals upto September, 2014 and projected for the subsequent period considering 5% increase. 'Any other charges' and 'supplementary bills' for the period October, 2014 to March, 2015 have been increased by 3%, considering historical experience, on ad hoc basis.
- 3.7.6 *NPCIL*: Power purchase from nuclear power Stations has been projected considering the actual quantum upto September, 2014 and projection based on previous trends. The Variable Charges have been projected considering actual cost upto September, 2014, with 5% increase thereafter. Considering historical experience, an increase of 3% has been considered on ad hoc basis in respect of other charges and supplementary bills for the second half of FY 2014-15, along with Rs. 2 Crore increase in Income Tax for FY 2013-14.
- 3.7.7 *SSP and Pench*: The power purchase quantum from SSP and Pench has been considered at actuals upto September 14 and projected for the rest of the period as per the trend in the previous year. The rate has been considered at Rs 2.05 /kWh
- 3.7.8 *RGPPL*: Due to non-availability of gas, the Availability of the plant has been considered as nil. As per PPA clause 5.9, MSEDCL has given consent for GSA/GTA for KG-D6 basin, which has expired on 31 March, 2014. Thereafter RGPPL has not approached it for execution of GSA for the future period. As such, now there is no GSA sufficient for the full quantum of power. Hence, vide letter dated 8 May, 2014, MSEDCL has terminated the PPA as the entire understanding between the parties has been disrupted. However, vide letter dated 22 May, 2014, RGPPL has denied the allegations in MSEDCL's notice.
- 3.7.9 *Dodson I and II*: The generation from these Stations has been considered at actuals upto September, 2014 and projected for the rest of the period as per the trend for the previous year.

- 3.7.10 For Dodson-II, the Annual Fixed Cost of Rs. 14.61 Crore approved by the Commission in Case No. 105 of 2009 has been considered. As regards Dodson I, MSEDCL has considered 5% increase in the rate applicable for FY 2013-14. In addition, 'other charges' have been considered at actuals upto September, 2014, and ad hoc increase of 3% has been considered for the balance period.
- 3.7.11 *IPPs (JSW, CGPL, Mundra, Adani Power Ltd., India Bulls Power Ltd. and EMCO):* Power purchase quantum from these sources has been considered as per actuals up to September, 2014. For the remaining 6 months, the quantum of energy has been considered as per normative Availability of 80%, or 85% as per the PPA, as the case may be. Due to coal shortage, PLF for the generating Station of India Bulls Power has been considered as 55%.(for 450 MW+45 MW).
- 3.7.12 The power purchase cost for these sources has been considered as per the PPA price schedule, with escalation Index as specified by CERC, wherever applicable.
- 3.7.13 *Traders:* MSEDCL submitted that MYT Regulations provide for additional short-term power procurement in case of shortfall or failure in supply from any source. Considering the coal shortage situation and increasing demand, during peak time MSEDCL needs to procure power in the short-term market. Accordingly, the quantum has been considered at actuals upto September, 2014, and at actual cost.
- 3.7.14 *Non-conventional Energy and CPPs:* Power purchase from NCE sources has been considered at actuals upto September, 2014, and projected for the rest of the period as per previous trend.
- 3.7.15 Power purchase cost from these sources has been considered at actuals upto September, 2014 and projected for the rest of the period considering 5% increase in cost.
- 3.7.16 *Transmission Charges (PGCIL):* PGCIL Transmission Charges have been considered based on actuals paid up to September, 2014, and projected at Rs 95 Crore per month, including ULDC charges, for the remaining period.

***Commission's Analysis***

- 3.7.17 As FY 2014-15 was over, the Commission sought the actual month-wise and source-wise power purchase quantum, cost and rate for FY 2014-15. In response, MSEDCL submitted the provisional details of power purchase made from various sources on a monthly basis up to March 2015. The revised power purchase details as submitted by MSEDCL are shown in the Table below:

**Table 25: Power purchase expenses as submitted by MSEDCL for FY 2014-15 (Rs. Crore)**

Source	Quantum	Cost	Per Unit Cost
	(MU)	(Rs Crore)	(Rs/kWh)
MSPGCL	45,074	19,161	4.25
NTPC	24,452	7,248	2.96
NPCL	5,057	1,218	2.41
SSP	768	157	2.05
PENCH	125	26	2.05
RGPPPL			
JSW POWER	2,006	575	2.87
TRADERS	3,267	1,219	3.73
DODSON (DLHP)	69	23	3.35
CGPL	4,823	1,183	2.45
Adani	15,991	4,898	3.06
India Bulls	1,943	593	3.05
EMCO	1,444	396	2.75
FBSM	(240)	20	(0.82)
PGCIL		1,207	
Reactive Charges		3	
NCE	8,700	4,590	5.28
<b>Total</b>	<b>1,13,480</b>	<b>42,517</b>	<b>3.75</b>

- 3.7.18 The Commission observed that several objections were received stating that, for FY 2014-15, FAC payable to Generating Companies to the tune of around Rs. 3000 Crore was projected by MSEDCL, but no revenue was projected towards FAC recovery. However, considering the actual data of power purchase, including actual FAC and the actual revenue, now submitted, the discrepancy raised no longer arises.
- 3.7.19 The actual quantum of power purchase (i.e., 113,480 MU) is higher by 7,535 MU as compared to that which was necessary (i.e., 105,945 MU) as per the energy input requirement and Energy Balance approved in the earlier section of this Order, based on the approved sales for FY 2014-15.
- 3.7.20 Thus, in line with the principles and methodology for estimation of energy input requirement, elaborated in earlier paragraphs approving the Energy Balance for FY 2014-15, the Commission provisionally disallows the excess power purchase (i.e. 7,535 MU) submitted by MSEDCL. Further, as discussed in under para 3.2.13

above, the Commission has also not considered the revised agriculture sales estimation, which is higher by 5728 MU during FY 2014-15 and excess surplus traded power as projected by MSEDCL in its additional submissions. Accordingly, the cost corresponding to the excess power purchase has been disallowed provisionally at an average rate of Rs. 3.75/kWh. It would be scrutinized further when truing up at the end of the Control Period, subject to prudence check.

**Table 26: Excess power purchase disallowed for FY 2014-15 (Rs. Crore)**

Particulars		Units	Value
Total Power Purchase Payable (projected by MSEDCL)	A	MU	1,13,480
Total Power Purchase Payable (approved under Energy Balance)	B	MU	1,05,945
Total Excess Power Purchase	C=A-B	MU	7,535
Avg. Power Purchase Cost (APPC)	D	Rs./kWh	3.75
Total Excess Power Purchase cost disallowed	E=C*D/10	Rs. Crore	2,823

3.7.21 The details of power purchase cost claimed by MSEDCL and approved by the Commission on a provisional basis for FY 2014-15 has been summarized below.

**Table 27: Power purchase expense approved for FY 2014-15 (Rs. Crore)**

	MSEDCL (revised submission)			Approved		
	Quantum	Cost	Per Unit Cost	Quantum	Cost	Per Unit Cost
	(MU)	(Rs Crore)	(Rs/kWh)	(MU)	(Rs Crore)	(Rs/kWh)
<b>Power Purchase</b>	<b>1,13,480</b>	<b>42,517</b>	<b>3.75</b>	<b>1,05,945</b>	<b>39,694</b>	<b>3.75</b>

### 3.8 Power Purchase Expenses for FY 2015-16

3.8.1 The methodology of source-wise projection of power purchase quantum and cost as adopted by MSEDCL for FY 2015-16 has been summarized below:

3.8.2 *MSPGCL*: MSEDCL submitted that the quantum of energy from MSPGCL generating Stations has been calculated using actual PLF for FY 2013-14 or 40%, whichever is higher, considering the actual plant capacity of the existing Stations. For Stations whose PLF is more than 80% in FY 2013-14, it has considered it as 80% as per the Commission's Order dated 3 March, 2014. For new Stations, PLF has been considered as 30% for the first 5 months after COD, and thereafter as 65%.



- As regards power purchase cost, Fixed Charges have been considered as per the Commission's corrigendum Order in Case No. 54 of 2013 dated 19 March, 2014 after pro rata reduction for existing Stations. For new Stations, the approved Fixed Charges have been considered as per the Order, with revised COD.
- 3.8.3 *NTPC*: Quantum has been projected by considering PLF 83% for thermal Stations as per CERC MYT Regulations dated 21 February, 2014. For the new generating Station at Mauda, the quantum of energy units has been considered as projected in the Commission's Order in Case No. 134 of 2012. VSTS Unit V generation has been considered, on the share available to MSEDCL, by applying 85% PLF. Generation from Gas Stations has been estimated considering past trends.
- 3.8.4 As regards power purchase cost, Fixed and Variable Charges have been projected with 5% increase over FY 2014-15. Considering historical experience, an increase of 3% has been considered on ad hoc basis for other charges and supplementary bills.
- 3.8.5 *NPCIL*: The quantum of energy units has been projected considering the previous year's trend. As regards power purchase cost, Variable Charges have been projected considering a 5% increase over FY 2014-15. Considering historical experience, an increase of 3% has been applied on ad hoc basis for other charges and supplementary bills, and an increase of Rs 2 Crore over the Income Tax for FY 2014-15 has been considered.
- 3.8.6 *SSP and Pench*: Quantum has been considered as per the previous trend, i.e. FY 2014-15. The power purchase rate has been considered at the fixed rate of Rs 2.05 /kWh
- 3.8.7 *RGPPL*: Due to non-availability of gas, its Availability has been considered as nil.
- 3.8.8 *Dodson I and II*: The quantum of energy units has been considered as per previous trend, i.e. FY 2014-15.
- 3.8.9 For Dodson-II, the Annual Fixed Cost of Rs. 14.10 Crs as approved in Case No. 105 of 2009 has been considered. For Dodson I, MSEDCL has considered 5% increase over the rate for FY 2014-15. In addition, 'other charges' have been projected, with ad hoc increase of 3% over FY 2014-15.
- 3.8.10 *IPPs (JSW, CGPL, Mundra, Adani Power Ltd., India Bulls Power Ltd. and EMCO)*: The quantum from these sources has been considered as per normative Availability of 80%, or 85% as per the PPA, as the case may be. Due to the coal shortage, PLF for generating Stations of India Bulls Power has been considered as 55%. (for 450 MW+45 MW).
- 3.8.11 The power purchase cost has been considered as per price schedule of PPA with escalation Index specified by CERC, wherever applicable.
- 3.8.12 *Traders*: No power purchase from Traders has been projected for FY 2015-16.

- 3.8.13 *Non-conventional Energy and CPP*: MSEDCL has projected the quantum of energy units from NCE considering the RPO obligations and approved energy units under the Business Plan Order. For CPPs, MSEDCL has considered approved energy units as per the Business Plan, with some adjustments.
- 3.8.14 The power purchase cost for these sources has been estimated considering historical experience, with an ad-hoc 5% p.a. increase over FY 2013-14.
- 3.8.15 *Transmission Charges*: PGCIL Transmission Charges have been considered at Rs. 100 Crore per month, including ULDC bills.
- 3.8.16 The total power purchase quantum and cost as projected by MSEDCL for FY 2015-16 is summarized in the following Table.

**Table 28: Power purchase expenses submitted by MSEDCL for FY 2015-16 (Rs. Crore)**

Sr. No.	Particulars	Projected by MSEDCL		
		Net units sent out for MSEDCL (MU)	Total cost (Rs. Crore)	Per unit rate (Rs./ kWh)
1	MSPGCL	51,087	16,446	3.22
2	NTPC	27,025	9,033	3.34
3	NPCIL	5,550	1,440	2.60
4	SSP	1200	246	2.05
5	Pench	130	27	2.05
6	Dodson	120	28	2.35
7	JSW	1,927	570	2.96
8	Adani Power	17,587	5,325	3.03
9	Mundra UMPP	5,158	1,228	2.38
10	India Bulls Power	5,319	1,915	3.60
11	NCE	11,218	6,671	5.95
12	CPP	1,977	523	2.64
13	EMCO Energy	1,370	374	2.73
14	Other Charges (PGCIL+Wheeling+Reactive)		1,259	
	<b>TOTAL</b>	<b>1,29,669</b>	<b>45,085</b>	<b>3.48</b>

***Commission's Analysis*****Commission's approach to approval of power purchase quantum and cost for FY 2015-16**

3.8.17 As set out in the Section on Energy Balance, the Commission has approved Energy Input requirement for FY 2015-16 as 111,609 MU, as against MSEDCL's projection of 129,669 MU.

3.8.18 Accordingly, for approval of the power purchase quantum and cost for FY 2015-16, the Commission has adopted the following two-step approach:

**Step-1:** Station-wise analysis of projection of energy quantum and rates for FY 2015-16, as against projections made by MSEDCL.

**Step-2:** Approval of Station-wise energy quantum and cost based on MOD principles for FY 2015-16 and approval of total power purchase quantum and cost for FY 2015-16.

**A] Step-1 Analysis: Projection of available Power Purchase Quantum and Rate**

**MSPGCL**

3.8.19 As sought by the Commission, MSEDCL submitted the break-up of Station-wise power purchase quantum and cost of MSPGCL, as considered for the projections for FY 2015-16. The same is summarized in the Table below:

**Table 29: Power purchase quantum and cost of MSPGCL Stations, as projected by MSEDCL for FY 2015-16**

MSPGCL Stations	Quantum of Energy considered for FY15-16	Energy Rate (as per MERC Order dt 3.3.14 in Case No. 54 of 2013)	Total Energy Charge	Total Fixed Cost	Total Cost
	(MU)	(Rs./Unit)	(Rs Crore)	(Rs Crore)	(Rs Crore)
<b>Thermal Existing Stations</b>					
Bhusawal	2,026	2.41	488	173	661
Khaparkheda	4,621	2.14	989	359	1,348
Nashik	4,062	3.49	1,418	353	1,770
Chandrapur	10,868	1.79	1,945	601	2,547
Paras Unit No. 3	3,224	1.7	548	515	1,063
Paras Unit No. 4		1.7	-	-	-
Parali	2,031	2.75	559	144	703
Parali Unit No. 6	2,297	2.21	508	367	875
Parali Unit No. 7		2.21	-	-	-
Koradi	2,395	3.17	759	253	1,013
GTPS Uran	1,572	2.26	355	77	432
Khaparkheda Unit No. 5	2,505	2.06	516	478	994
Khusawal Unit No. 4	2,203	1.87	412	569	981
Bhusawal Unit No. 5	2,667	1.84	491	569	1,060

MSPGCL Stations	Quantum of Energy considered for FY15-16	Energy Rate (as per MERC Order dt 3.3.14 in Case No. 54 of 2013)	Total Energy Charge	Total Fixed Cost	Total Cost
	(MU)	(Rs./Unit)	(Rs Crore)	(Rs Crore)	(Rs Crore)
<b>New Stations</b>					
Chandrapur Unit No. 8	1,788	1.26	225	252	478
Chandrapur Unit No. 9	927	1.26	117	168	285
Parli Unit No. 8	787	2.27	179	152	331
Koradi Unit No. 8	2,361	1.25	295	347	642
Koradi Unit No. 9	940	1.25	117	217	334
Koradi Unit No. 10	568	1.25	71	86	157
<b>Total Thermal</b>	<b>47,842</b>		<b>9,992</b>	<b>5,682</b>	<b>15,674</b>
<b>Total Hydro</b>	<b>3,245</b>		<b>51</b>	<b>721</b>	<b>772</b>
<b>Total (Thermal+ Hydro)</b>	<b>51,087</b>		<b>10,043</b>	<b>6,403</b>	<b>16,446</b>

3.8.20 In its recent Mid-Term Review Order in respect of MSPGCL in Case No. 15 of 2015, the Commission has approved the cost and quantum of power purchase of existing Stations of MSPGCL for FY 2015-16 as shown below.

**Table 30: Approved Cost and Quantum of MSPGCL Stations as per Case No. 15 of 2015**

Station	Capacity	Net Generation	Variable Charge	AFC
	(MW)	(MU)	(Rs. /kWh)	(Rs. Crore)
Bhusawal	420	1,495	3.28	112.80
Chandrapur	2,340	13,183	2.53	781.46
Khaperkheda	840	5,330	2.25	449.61
Koradi	620	1,899	3.15	215.86
Nasik	630	3,833	3.95	357.88
Parli	630	2,758	2.97	193.34
Uran	672	3,149	2.58	177.43
Paras Unit No. 3 & Unit No. 4	500	3,125	1.95	533.31
Parli Unit No. 6 & Unit No. 7	500	3,416	2.72	565.71
Khaperkheda Unit No. 5	500	3,072	2.33	549.52
Bhusawal Unit No. 4 and Unit No. 5	1,000	7,018	2.54	1,396.31
Hydro	2,585	4,612	-	714.68
<b>Total</b>	<b>11,237</b>	<b>52,890</b>	<b>-</b>	<b>6,046.91</b>

- 3.8.21 For projecting power purchase quantum and cost of existing Stations of MSPGCL, the Commission has considered the rates, quantum and the cost as approved above in Case No. 15 of 2015.
- 3.8.22 As regards, the projected Hydro generation of MSPGCL, the net generation and AFC have also been approved in Case No.15 of 2015. However, since the Commission has approved generation from Koyna and Bhira Hydro Stations, which exceed the design energy approved under the MYT Order, it has allowed total additional Energy Charges of Rs. 5.18 Crore over and above the approved AFC. The actual generation from Hydro Stations and adjustment in the costs thereof shall be considered at the time of truing up at the end of the Control Period. Further, the Hydro Stations of MSPGCL have been included as Must Run Stations while applying the MOD principles for approval of power purchase quantum for FY 2015-16.
- 3.8.23 As regards the upcoming Units of MSPGCL viz., Chandrapur-8 and 9, Parli-8, Koradi-8, 9 and 10, the Commission has considered the generation from these Units based on the number of operating days post expected CoD in FY 2015-16 and their generation on provisional basis. Similarly, the Fixed Cost of these Units have been approved based on the annual Fixed Cost allowed in the MSPGCL MYT Order in Case No. 54 of 2013, adjusted on pro rata basis depending on the number of operating days in FY 2015-16 subsequent to their CoD. The Variable Charge of these Units has been considered as approved in the MYT Order (Case No. 54 of 2013).
- 3.8.24 The projected quantum of energy generation of various Stations of MSPGCL and their Variable Cost thereof has been limited to the extent of application of MOD principles for FY 2015-16, for the purpose of allowing power purchase quantum and cost for the year.

***NTPC***

- 3.8.25 The units generated from NTPC Stations are projected by considering PLF of 85% for thermal Stations, as per CERC MYT Regulations, 2014.
- 3.8.26 As regards new Stations (VSTPS Unit V), the Commission has considered generation as per its share, applying 85% PLF, as submitted by MSEDCL. It has considered the Fixed Charges claimed by MSEDCL towards this Station for FY 2015-16.
- 3.8.27 The power purchase quantum and Variable Cost of the NTPC generating Stations have been limited to the extent of application of MOD Principles for FY 2015-16.
- 3.8.28 The Commission has approved the Fixed Charges payable to the NTPC power plants as projected by MSEDCL.
- 3.8.29 MSEDCL has claimed expenses related to power purchase from NTPC on account of other charges, supplementary bills and IT adjustment for FY 2015-16. MSEDCL has clarified that charges other than Capacity and Energy charges are treated as

‘other charges’. They include interest, insurance, ULDC, RLDC and NLDC charges; water Cess, ED –Cess, Cess - CVD etc. The bills pertaining to the previous financial year or months (revision of bills) passed for payment in the current year are covered under ‘supplementary bills’. For power purchase cost projection for FY 2015-16, the Commission has provisionally approved these charges as they are payable by MSEDCL during the year to NTPC. However, the actuals will be considered at the time of truing up for FY 2015-16, subject to prudence check.

***NPCIL***

- 3.8.30 The Commission approves the power purchase quantum and cost for NPCIL generating Stations for FY 2015-16 as submitted by MSEDCL. NPCIL Stations have been considered as Must Run while applying the MoD principles for FY 2015-16.
- 3.8.31 MSEDCL has claimed expenses related to power purchase from NPCIL on account of other charges, supplementary bills and IT adjustment for FY 2015-16. For projecting the power purchase cost for FY 2015-16, the Commission has provisionally approved these charges as they are payable by MSEDCL during the year to NPCIL. They will be trued up considering actuals at the end of the Control Period.

***SSP, Pench, Dodson I & II:***

- 3.8.32 The Commission approves the power purchase quantum and cost from SSP, Pench, and Dodson I & II as proposed by MSEDCL for FY 2015-16. These Stations have been included as Must Run Stations while applying MoD principles for approval of power purchase for FY 2015-16. These will be trued up considering actuals at the end of the Control Period, subject to prudence check.

***NCE and CPP***

- 3.8.33 The Commission approves the power purchase quantum and cost from RE sources and CPPs as proposed by MSEDCL for FY 2015-16. These Stations have been included as Must Run Stations while applying the MoD principles for approval of power purchase for FY 2015-16. Truing up will be undertaken at the end of the Control Period considering actuals, subject to prudence check.

***Renewable Purchase Obligation for FY 2015-16***

- 3.8.34 As per the RPO-REC Regulations, each Distribution Licensee is required to meet 9% of its requirement through RE sources in FY 2015-16, including 0.50% through Solar sources and 0.1% from mini/micro Hydro generation. Based on the projection of power purchase quantum approved by the Commission, the total power purchase projected from NCE sources contributes to around 10% of the approved total power purchase for FY 2015-16. Thus, based on MSEDCL’s projections, it would be able to meet the overall RPO target of 9% set for the year. However, MSEDCL has not projected how it would meet the RE resource-specific

RPO targets. MSEDCL has to ensure that these resource-specific RPO targets for Solar, Mini/Micro Hydro and Non-Solar RE are met, and that it follows the dispensations in the Commission's with regard to meeting the RPO shortfalls cumulatively in FY 2015-16.

***RGPPL and Traders***

- 3.8.35 As regards power purchase from RGPPL and Traders, MSEDCL has not projected any power purchase from these sources. The Commission has considered MSEDCL's submission accordingly.

***Independent Power Producers and UMPP***

- 3.8.36 MSEDCL has considered power purchase from Mundra UMPP and IPPs, viz., JSW, EMCO Power, India Bulls Power and Adani Power with capacity shares as shown in the following Table.

**Table 31: Capacity Share of IPPs for MSEDCL (MW)**

Stations	Installed Capacity (MW)	Capacity Share for MSEDCL (MW)
Mundra UMPP	4000	800
Adani Power 1320 MW	1320	1320
Adani Power 1200 MW	1200	1200
EMCO Power	200	200
India Bulls Power	1200	1200
Adani Power 125 MW	125	125
JSW Energy	300	300

- 3.8.37 The Commission has verified the power purchase rates and other conditions outlined under the PPAs entered into by MSEDCL with the respective Generating Companies. The Commission has computed the generation from these Units at the normative Availability and Auxiliary Consumption. Except for JSW Energy, the generation from these Stations was found to be matching with the projections made by MSEDCL. As regards JSW Energy, the estimate of projected generation by the Commission works out to 1913 MU, which is marginally different from the MSEDCL projection of 1927 MU.
- 3.8.38 The per unit rates for power purchase from these Stations were found to be in line with the provisions of the PPA, and the Commission has considered them for projecting the MoD stack of generating Stations for FY 2015-16. Further, the Commission has provisionally approved the entire Fixed Charge payable to these Stations as projected by MSEDCL. The power purchase quantum and variable cost of these generating Stations have been limited to the extent of application of Merit Order Principles for FY 2015-16. This will be trued up considering actuals at the end of the Control Period, subject to prudence check.

***Short- term Power Purchase***

- 3.8.39 The Energy Balance for FY 2015-16 has been approved considering that there will be no shortfall in supply availability for FY 2015-16 and that entire demand projection would be met through projected sources of power during the year. However, in case of any shortfall in energy available from the approved sources, MSEDCL may have to source power from Traders or any other sources at the market price. The Commission observes that the weighted average rate at which MSEDCL has procured power from Traders during FY 2014-15 is 3.73 Rs/kWh. The average power purchase cost approved for FY 2015-16 as below is Rs. 3.70 /kWh, and the marginal power purchase cost approved for the determination of CSS is 4.13 Rs/kWh. Based on these, the Commission approves a ceiling rate of Rs. 4.00 per kWh for power procurement from short-term sources for FY 2015-16, if required and subject to the conditions set out in the following paragraphs.
- 3.8.40 The Ministry of Power (MoP), vide Resolution dated 15 May, 2012, has issued Guidelines for short-term power procurement by Distribution Licensees through Tariff based competitive bidding process. In line with the same, the Commission directs MSEDCL to procure the entire short-term power including the short-term power over and above the approved short-term power purchase for FY 2015-16, in case the need arises, through competitive bidding route only in accordance with the above-said Guidelines, except in case of power procured from the Power Exchange or under Banking mechanism. In accordance with the said Resolution, MSEDCL shall have to submit a Petition to the Commission within two days of signing the PPA, for adoption of Tariff determined through competitive bidding, in case the quantum of power procured and tariff determined are higher than the above blanket approval granted by the Commission. Alternatively, MSEDCL may also approach the Commission for prior approval of such short-term power purchase in excess of the approved quantum and cost of short-term power purchase, in case MSEDCL does not procure short-term power through the competitive bidding route.
- 3.8.41 The MoP Resolution also states that, if the tariff of short-term power being procured by the Distribution Licensee is within the blanket approval granted by the Commission during the determination of ARR of the respective years, it shall be considered to have been adopted by the Commission. If that is not the case, the Licensee will have to submit a Petition to the Commission for adoption of Tariff.
- 3.8.42 MSEDCL has not projected any short-term power purchase for FY 2015-16. The Commission will consider actual short-term power purchase, if any and subject to prudence check, at the time of true up.

***Transmission Charges (PGCIL)***

- 3.8.43 The Commission notes that the PGCIL charges are 5% higher than the charges paid in FY 2013-14 and 3% higher than those estimated for FY 2014-15. As the increase projected by MSEDCL is reasonable, the Commission approves it. However, it will be trued up based on actuals at the end of the Control Period.



**B| Step-2 Analysis : Application of Merit Order Despatch Principle**

- 3.8.44 In Step-2, the Commission has applied the Merit Order principles and prepared a Merit Order Stack of all thermal generating Stations/sources in the ascending order of their per unit Energy Charges. The quantum of energy generation from each source is provisionally allowed along with the corresponding Variable Cost until the projected Energy Input requirement of 1,11,609 MU, as per the Energy Balance, is met as per the MoD Stack.
- 3.8.45 Although the despatch from generating Stations shall be subjected to Merit Order, the recovery of Fixed Cost for such Stations shall be linked to its availability. In view of this, the Commission has provisionally allowed the Fixed Charges for all the Stations as approved under Step-1 above for FY 2015-16.
- 3.8.46 The following Table summarises the Stations/Units classified as 'Must Run' in FY 2015-16.

**Table 32: Power purchase from Stations/Units (excluded from MOD) in FY 2015-16**

S No.	Station Name	Energy Available (MU)	Energy Charges (Rs/kWh)	Power Purchase Approved (MU)
	<b>Excluded from MOD</b>			
1	KAPP	1050	2.46	1,050
2	TAPP 1&2	1200	1.04	1,200
3	TAPP 3&4	3300	3.07	3,300
4	NCE excluding CPP	11218	5.81	11,218
5	CPP	1977	2.51	1,977
6	Dodson I	56	2.45	56
7	Dodson II	64	1.83	64
8	SSP	1200	2.21	1,200
9	Pench	130	2.21	130
10	MSPGCL Hydro*	4612	-	4,612
<b>A</b>	<b>Excluded from MOD</b>	<b>24,807</b>		<b>24,807</b>

\* (Includes Koyna, Bhira, Tillari and other Hydro Stations of MSPGCL)

- 3.8.47 The projected energy generation quantum and Variable Cost, as per MoD principles followed for FY 2015-16, as provisionally approved by the Commission is shown below:

**Table 33: Power purchase approved by Commission based on MoD for FY 2015-16**

S No.	Station Name	Energy Available (MU)	Energy Charges (Rs/kWh)	Power Purchase Approved (MU)
1	KSTPS III	936	1.12	936

S No.	Station Name	Energy Available (MU)	Energy Charges (Rs/kWh)	Power Purchase Approved (MU)
2	KSTPS	4,661	1.13	4,661
3	Koradi Unit No. 10	1,481	1.25	1,481
4	Koradi Unit No. 9	1,781	1.25	1,781
5	Koradi Unit No. 8	2,962	1.25	2,962
6	Chandrapur Unit No. 8	2,170	1.26	2,170
7	Chandrapur Unit No. 9	1,562	1.26	1,562
8	VSTP III	2,123	1.50	2,123
9	EMCO Power	1,370	1.50	1,370
10	VSTP IV	2,292	1.53	2,292
11	VSTP V	557	1.53	557
12	VSTP II	2,548	1.54	2,548
13	Adani Power 1320 MW	8,511	1.55	8,511
14	Mundra UMPP	5,158	1.55	5,158
15	SIPAT TPS 1	4,363	1.58	4,363
16	SIPAT TPS 2	2,068	1.60	2,068
17	VSTP I	3,268	1.62	3,268
18	Paras Unit No. 3 and Unit No. 4	3,125	1.95	3,125
19	IPP – JSW	1,913	2.05	1,913
20	Adani Power 1200 MW	8,220	2.16	8,220
21	Khaperkheda	5,330	2.25	5,330
22	Parli Unit No. 8	451	2.27	451
23	Khaperkheda Unit No. 5	3,072	2.33	3,072
24	India Bulls Power	5,319	2.46	5,319
25	Chandrapur	13,183	2.53	11,562
26	Bhusawal Unit 4	3,509	2.54	-
27	Bhusawal Unit No. 5	3,509	2.54	-
28	Uran	3,149	2.58	-
29	Gandhar	1,404	2.67	-
30	KhSTPS-II	1,017	2.69	-
31	Parli Unit No. 6 and Unit No. 7	3,416	2.72	-
32	Kawas	1,432	2.86	-
33	Parli	2,758	2.97	-
34	Adani Power 125 MW	856	3.02	-
35	Koradi	1,899	3.15	-
36	Bhusawal	1,495	3.28	-
37	Nasik	3,833	3.95	-

S No.	Station Name	Energy Available (MU)	Energy Charges (Rs/kWh)	Power Purchase Approved (MU)
38	Mauda	1,488	3.99	-
<b>B</b>	<b>Total Power Purchase</b>	<b>1,18,189</b>		<b>86,803</b>

3.8.48 Based on the above analysis, the power purchase cost and quantum provisionally approved by the Commission for FY 2015-16 is summarised below. This will be finalised, considering the actuals and after prudence check, at the time of truing up of expenses for FY 2015-16.

**Table 34: Power purchase quantum and cost approved by Commission for FY 2015-16**

Source of Power (Station wise)	Quantum of Energy available at generation bus-bar (MU)	Capacity Charges payable by Utility (Rs. Crore)	Variable cost per unit (Rs/ kWh)	Total Variable Charges (Rs Crore)	Other Charges (incl. supplementary & I Tax) (Rs Crore)	Total cost (Rs Crore)	Rate per unit of power procured (Rs /kWh)
<b>MSPGCL</b>	<b>38,106</b>	<b>7,610</b>	<b>1.78</b>	<b>6,800</b>	<b>-</b>	<b>14,410</b>	<b>3.78</b>
KSTPS	4,661	282	1.13	525	14	821	1.76
KSTPS III	936	167	1.12	105	7	279	2.98
VSTP I	3,268	224	1.62	531	208	963	2.95
VSTP II	2,548	178	1.54	392	185	756	2.97
VSTP III	2,123	258	1.50	318	133	709	3.34
VSTP IV	2,292	188	1.53	351	2	541	2.36
VSTP V	557	192	1.53	85	-	278	4.98
KAWAS	0	128	2.86	0	(4)	124	
GANDHAR	0	178	2.67	0	4	181	
KhSTPS-II	0	137	2.69	0	9	146	
SIPAT TPS 2	2,068	280	1.60	331	104	715	3.46
SIPAT TPS 1	4,363	665	1.58	691	39	1,395	3.20
Mauda	0	455	3.99	0	(25)	430	

Source of Power (Station wise)	Quantum of Energy available at generation bus-bar (MU)	Capacity Charges payable by Utility (Rs. Crore)	Variable cost per unit (Rs/ kWh)	Total Variable Charges (Rs Crore)	Other Charges (incl. supplemen tary & I Tax) (Rs Crore)	Total cost (Rs Crore)	Rate per unit of power procured (Rs /kWh)
<b>NTPC(Sub total)</b>	<b>22,817</b>	<b>3,333</b>		<b>3,330</b>	<b>677</b>	<b>7,340</b>	<b>3.22</b>
KAPP	1,050	0	2.46	258	14	271	2.58
TAPP 1&2	1,200	0	1.04	125	7	132	1.10
TAPP 3&4	3,300	0	3.07	1,013	24	1,037	3.14
<b>NPCIL(Sub total)</b>	<b>5,550</b>	<b>0</b>		<b>1,395</b>	<b>44</b>	<b>1,440</b>	<b>2.59</b>
SSP	1,200	0	2.21	265	-	265	2.21
Pench	130	3	2.21	29	-	32	2.43
Dodson I	56	0	2.45	14	0	14	2.49
Dodson II	64	0	1.83	12	0	12	1.84
IPP - JSW	1,913	197	2.05	393	5	595	3.11
Mundra UMPP	5,158	469	1.55	801	1	1,271	2.46
Adani Power 125 MW	0	120	3.02	0	-	120	
Adani Power 1320 MW	8,511	947	1.55	1,319	-	2,266	2.66
Adani Power 1200 MW	8,220	1156	2.16	1,773	-	2,929	3.56
EMCO Power	1,370	182	1.50	206	-	388	2.83
India Bulls Power	5,319	585	2.46	1,309	-	1,894	3.56
NCE Excluding CPP	11,218	0	5.81	6,520	-	6,520	5.81
CPP	1,977	0	2.51	496	-	496	2.51
<b>IPP &amp; Other sources</b>	<b>45,136</b>	<b>3,659</b>		<b>13,136</b>	<b>6</b>	<b>16,801</b>	<b>3.72</b>

Source of Power (Station wise)	Quantum of Energy available at generation bus-bar (MU)	Capacity Charges payable by Utility (Rs. Crore)	Variable cost per unit (Rs/ kWh)	Total Variable Charges (Rs Crore)	Other Charges (incl. supplemen tary & I Tax) (Rs Crore)	Total cost (Rs Crore)	Rate per unit of power procured (Rs /kWh)
<b>(Sub total)</b>							
Power Grid				1,250	-	1,250	
Reactive Energy Charges				4.01	-	4.01	
Wheeling Charges				4.72	-	4.72	
<b>TOTAL Power Purchase by MSEDCL</b>	<b>1,11,609</b>	<b>14,602</b>		<b>25,919</b>	<b>728</b>	<b>41,249</b>	<b>3.70</b>

### 3.9 Transmission Charges and MSLDC Charges for FY 2013-14 to FY 2015-16

3.9.1 MSEDCL has considered the Transmission Charges on the basis of the tariff for the Intra-State Transmission System (InSTS) for FY 2013-14 as approved in Order dated 13 May, 2013 (Case No. 56 of 2013).

3.9.2 For FY 2014-15 and FY 2015-16, the Transmission Charges have been considered based on the InSTS Tariff Order in Case No.123 of 2014, under which the monthly Transmission Charges cost for MSEDCL has increased by Rs. 53.48 Crore and Rs.31.95 Crore for FY 2014-15 and FY 2015-16, respectively. Since the Order is applicable from September, 2014, the impact of this additional Rs. 53.48 Crore is considered for 7 months of FY 2014-15, and the revised Transmission Charges have been considered for FY 2015-16.

3.9.3 MSLDC Fees & Charges have also been considered as per its Budget Order for FY 2014-15 dated 7 March, 2014 (Case No. 178 of 2013). The same charges have been assumed for FY 2015-16 as well.

#### *Commission's Analysis*

3.9.4 The Commission has approved the Transmission Charges for FY 2013-14 and FY 2014-15, based on its InSTS Tariff Orders in Case Nos. 56 of 2013 and 123 of 2014. The MSLDC Charges for these two years have been approved based on the Orders in Case Nos. 133 of 2012 and 178 of 2013. These are the same as submitted by MSEDCL.

3.9.5 In its recent Order in Case No.57 of 2015, the Commission has determined MSEDCL's share out of the approved Total Transmission Cost (TTSC) for FY 2015-16 as Rs. 3600.62 Crore. For allowing the expenses to MSEDCL on account

of Intra-State Transmission Charges for FY 2015-16, the Commission has considered this latest approved amount.

- 3.9.6 The MSLDC Budget for FY 2015-16 is yet to be approved. For approval of MSLDC Charges for FY 2015-16, the Commission has considered MSEDCL's share of MSLDC Charges as approved in the MSLDC Budget Order for FY 2014-15 in Case No. 178 of 2013, which amounts to Rs. 26.69 Crore.
- 3.9.7 The approved Transmission Charges, including MSLDC Charges, for FY 2013-14 to FY 2015-16 are as shown below.

**Table 35: Transmission Charges and MSLDC Charges approved by Commission for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MSEDCL	Approved	MSEDCL	Approved	MSEDCL	Approved
<b>Transmission and MSLDC Charges</b>	<b>5,604</b>	<b>5,604</b>	<b>5,490</b>	<b>5,490</b>	<b>6,320</b>	<b>3627</b>

### 3.10 O&M Expenses for FY 2013-14 to FY 2015-16

- 3.10.1 MSEDCL has considered the O&M Expenses for FY 2013-14 on actual basis as per its audited Annual Accounts. The O&M Expenses for FY 2013-14, as submitted by MSEDCL, are as shown below:

**Table 36: O&M Expenses for FY 2013-14 as submitted by MSEDCL (Rs. Crore)**

Particulars	MSEDCL (FY 2013-14)
Employee Expenses	4,411
A&G Expenses	613
RM Expenses	752
Less: O&M Expenses Capitalised	456
<b>Net O&amp;M Expenses</b>	<b>5,320</b>

- 3.10.2 While MSEDCL has claimed O&M Expenses as per the Annual Accounts, it has also sought that they be approved as per the norms specified in the MYT Regulations. Accordingly, it has worked out the O&M Expenses separately for Wires Business and Supply Business on a normative basis for FY 2013-14 to FY 2015-16 in accordance with the MYT Regulations.
- 3.10.3 For estimating O&M Expenses as per the norms, MSEDCL submitted that all Supply Business consumers also use its network. Further, most OA consumers have opted for partial OA, with very few using only Wires. Therefore, MSEDCL has considered the same number of consumers for its Wires Business and its Supply Business. Similarly, considering the various capital investment schemes and consequent addition to its network, MSEDCL has projected the network asset base.

3.10.4 Considering the O&M norms specified under MYT Regulations and the relevant parameters, MSEDCL has projected the following O&M Expenses for Wires Business and Supply Business during the Control Period.

**Table 37: O&M Expenses on normative basis as submitted by MSEDCL (Supply)**

S.No.	Particulars	Units	MSEDCL		
			FY 2013-14	FY 2014-15	FY 2015-16
<b>A</b>	<b>Composite O&amp;M Norms</b>				
<b>a)</b>	<b>O&amp;M Charges Norm specified by the Commission</b>				
	For Sales in Supply Business	paise/kWh	8.89	9.40	9.94
	For No. of Consumers in Supply Business	Rs Lakh/ '000 Consumers	4.59	4.85	5.13
	R&M Expenses	% of GFA	0.50%	0.50%	0.50%
<b>b)</b>	<b>Parameters for O&amp;M Expenses</b>				
	Sales	MU	85,631	87,189	93,316
	No. of Consumers in Supply Business	'000 Consumers	20,949	22,063	23,128
	Opening GFA	Rs Crore	3,327	3,784	4,196
<b>B)</b>	<b>Total O&amp;M Expenses (Supply)</b>	<b>Rs Crore</b>	<b>1,739</b>	<b>1,909</b>	<b>2,135</b>

**Table 38: O&M Expenses on normative basis as submitted by MSEDCL (Wires)**

S.No.	Particulars	Units	MSEDCL		
			FY 2013-14	FY 2014-15	FY 2015-16
<b>A</b>	<b>Composite O&amp;M Norms</b>				
<b>a)</b>	<b>O&amp;M Charges Norm specified by the Commission</b>				
	For Wheeled Energy	paise/kWh	12.83	13.57	14.34
	For No. of Consumers in Wires Business	Rs Lakh/ '000 Consumers	6.62	7.00	7.40
	R&M Expenses	% of GFA	4.00%	4.00%	4.00%
<b>b)</b>	<b>Parameters for O&amp;M Expenses</b>				
	Wheeled Energy	MU	99,575	1,08,629	1,23,144

S.No.	Particulars	Units	MSEDCL		
			FY 2013-14	FY 2014-15	FY 2015-16
	No. of Consumers in Wires Business	'000 Consumers	20,949	22,063	23,128
	Opening GFA	Rs Crore	29,941	34,056	37,760
<b>B)</b>	<b>Total O&amp;M Expenses (Wires)</b>	<b>Rs Crore</b>	<b>3,862</b>	<b>4,381</b>	<b>4,988</b>

**Table 39: O&M Expenses on normative basis as per MSEDCL (Wires+Supply) (Rs Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
O&M Expenditure for Retail Supply Business	1739	1,909	2,135
O&M Expenditure for Wires Business	3862	4,381	4,988
<b>Operation &amp; Maintenance Expenses</b>	<b>5601</b>	<b>6,289</b>	<b>7,123</b>

*Commission's Analysis*

- 3.10.5 For approval of O&M Expenses for the Wires Business and Supply Business, the Commission has considered the norms specified under Regulations 78.4.1 and 97.2.1 of the MYT Regulations.
- 3.10.6 Based on the analysis set out in relevant Sections of this Order, the Commission has considered the revised sales, GFA and number of consumers for allowing the normative O&M Expense for the Control Period. The Commission notes that, while projecting O&M Expenses, MSEDCL has considered parameters such as sales and GFA at the aggregate level, including those pertaining to the DF Areas. However, O&M Expenses in the DF areas would anyway be taken care by the Franchisee and, therefore, allowing normative O&M Expenses on the parameter values on aggregate, including such DF Areas would not be proper.
- 3.10.7 As per terms of the Franchisee arrangements, MSEDCL is not required to incur O&M expenditure towards DF operations as the Franchisee is required to undertake O&M activities within its area, for which it is suitably compensated as per provisions of the Franchisee Agreement. The Input Rate for supply of power by MSEDCL to Franchisees has been determined taking this aspect into account. Hence, the Commission has not considered sales and number of consumers pertaining to Distribution Franchisees while determining the normative O&M Expenses allowable to MSEDCL. However, since the data on GFA pertaining to Franchisee areas was not separately available, it has not been deducted. The Commission directs MSEDCL to submit the detailed break-up of GFA for each Franchisee separately for truing up at the end of the Control Period. Further, as regards projection of normative O&M Expenses for FY 2015-16, the Commission



has considered the fact that Franchisee operations at Aurangabad have ceased, and it is now included as part of MSEDCL distribution operations. Thus, the sales and number of consumers projected for Aurangabad have now been included as part of MSEDCL and the normative O&M Expenses for FY 2015-16, have been provisionally allowed accordingly.

- 3.10.8 The Commission has approved the following expenses towards O&M Expenses for MSEDCL for its Wires and Supply Businesses.

**Table 40: O&M Expenses approved by Commission (Supply)**

S.No.	Particulars	Units	Approved		
			FY 2013-14	FY 2014-15	FY 2015-16
<b>A</b>	<b>Composite O&amp;M Norms</b>				
<b>a)</b>	<b>O&amp;M Charges Norm specified by the Commission</b>				
	For Sales in Supply Business	paise/kWh	8.89	9.40	9.94
	For No. of Consumers in Supply Business	Rs Lakh/ '000 Consumers	4.59	4.85	5.13
	R&M Expenses	% of GFA	0.50%	0.50%	0.50%
<b>b)</b>	<b>Parameters for O&amp;M Expenses</b>				
	Sales	MU	79,683	80,211	86,966
	No. of Consumers in Supply Business	'000 Consumers	20,949	22,063	23,391
	Opening GFA	Rs Crore	3,197	3,650	4,057
<b>B)</b>	<b>Total O&amp;M Expenses</b>	<b>Rs Crore</b>	<b>1,686</b>	<b>1,842</b>	<b>2,085</b>

**Table 41: O&M Expenses approved by Commission (Wires)**

S.No.	Particulars	Units	Approved		
			FY 2013-14	FY 2014-15	FY 2015-16
<b>A</b>	<b>Composite O&amp;M Norms</b>				
<b>a)</b>	<b>O&amp;M Charges Norm specified by the Commission</b>				
	For Wheeled Energy	paise/kWh	12.83	13.57	14.34
	For No. of Consumers in Wires Business	Rs Lakh/ '000 Consumers	6.62	7.00	7.40
	R&M Expenses	% of GFA	4%	4%	4%
<b>b)</b>	<b>Parameters for O&amp;M Expenses</b>				
	Wheeled Energy	MU	91,953	92,551	1,00,092
	No. of Consumers in Wires Business	'000 Consumers	20,949	22,063	23,391
	Opening GFA	Rs Crore	28,777	32,846	36,511
<b>B)</b>	<b>Total O&amp;M Expenses</b>	<b>Rs Crore</b>	<b>3,718</b>	<b>4,114</b>	<b>4,627</b>

**Table 42: O&M Expenses approved by Commission (Wires+Supply) (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
O&M Expenditure for Retail Supply Business	1,686	1,842	2,085
O&M Expenditure for Wires Business	3,718	4,114	4,627
<b>Operation &amp; Maintenance Expenses</b>	<b>5,404</b>	<b>5,957</b>	<b>6,712</b>

3.10.9 Under the MYT Regulations, O&M Expense is a controllable parameter, and any variation in the actual vis-a-vis normative O&M Expenses should be considered as efficiency gain or efficiency loss and shared among MSEDCL and consumers in accordance with Regulation 14. Accordingly, the difference between the actual O&M Expenses as per the Audited Accounts and the O&M Expenses allowed on normative basis for FY 2013-14 is considered as an efficiency gain, and has been shared between MSEDCL and the consumers. The details of sharing of gains have been presented in subsequent Sections of this Order.

### 3.11 Capital Expenditure and Capitalisation for FY 2013-14 to FY 2015-16

3.11.1 MSEDCL submitted the details of capital expenditure and capitalisation that it has considered for FY 2013-14 and FY 2015-16 as under.

**Table 43: Capex and Capitalisation as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particular	FY 2013-14 (Actual)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Capex	3,349	4,099	3,077
Capitalisation	4,447	4,115	3,594

3.11.2 The following Tables summarise the scheme-wise details of Capital Expenditure and Capitalisation for DPR Schemes and Non-DPR schemes as submitted by MSEDCL for FY 2013-14 to FY 2015-16.

**Table 44: DPR scheme Capex and Capitalisation submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particular	FY 2013-14 (Actual)		FY 2014-15 (Projected)		FY 2015-16 (Projected)	
	Capex	Capital - isation	Cap ex	Capit al- isatio n	Cap ex	Capi tal- isatio n
DPR Schemes						
Infra Plan Works	1,272	1,697		341		110
GFSS-I	74	86		1		0
GFSS-II	66	83	7	6		2
GFSS-III	63	62		7		2

Particular	FY 2013-14 (Actual)		FY 2014-15 (Projected)		FY 2015-16 (Projected)	
	Capex	Capital - isation	Cap ex	Capit al- isation	Cap ex	Capi tal- isation
Fixed Capacitor Scheme				27		9
AMR			10	10	8	9
APDRP						
Phase-I		252		173		55
Phase-II						
R-APDRP A	230	76	65	210		68
R-APDRP B	368	220	1,000	838		269
SCADA Part A				1		0
Phase-II(Part I & II)		1				
Phase-III	8	25		10		3
SPA:PE	510	614		4		1
P: SI	52	153	100	158		13
P: IE	62	83		7		2
DRUM						
RGVY	63	102	100	128	100	116
Elimination of 66KV line	7	7	10	7		2
Infra PH II			1,800	1,260	2,200	2,055
GFSS IV	140	247	111	119	100	113
LT Capacitor Scheme I&II			100	70		23
Single Phasing-Left Out Villages	27	36	238	167	152	168
ERP			75	52	34	42
IT( Server Consolidation DCDR Using Virtualisation)		0	15	11		3
AG Metering		9				
New Schemes						
Smart Grid Project at Baramati			14	10	14	14
Deogad Wind Power Project			45	32	45	44
Establishment of Meter Testing NABL Labs at Nagpur & Pune			16	11	20	19
Ag DSM-Pilot project in Mangalwedha, Solapur			1	0	1	1
Star rated ceiling fan Phase-I			1	1		0
Star rated ceiling fan Phase-II					8	6
Solar Ag Pump			2			2
<b>Total DPR Schemes (a)</b>	<b>2,942</b>	<b>3,754</b>	<b>3,709</b>	<b>3,660</b>	<b>2,682</b>	<b>3,152</b>

**Table 45: Non-DPR scheme Capex and Capitalisations submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particular	FY 2013-14 (Actual)		FY 2014-15 (Projected)		FY 2015-16 (Projected)	
	Capex	Capital- isation	Capex	Capital- isation	Capex	Capital - isation
<b>Non-DPR Schemes</b>						

Particular	FY 2013-14 (Actual)		FY 2014-15 (Projected)		FY 2015-16 (Projected)	
	Capex	Capital- isation	Capex	Capital- isation	Capex	Capital - isation
FMS		0				
MIS/IT Backbone/(Integrated Sys+ Big Data+ Communication Backbone)		2				
Load Management				6		2
Distribution Scheme						
P.F.C Urban Distribution Scheme	45	54		0		0
MIDC Interest Free Loan Scheme		12		9		3
Evacuation	7	7	40	28	50	47
Evacuation Wind Generation	4	3	30	22	30	29
R E Dist						
I-RE/ ND						
DPDC/ SCP	22	33	70	51	70	69
DPDC/TSP+OTSP	47	47	70	50	70	68
Rural Electrification(Grant)				5		1
JBIC				17		5
New Consumers				10		3
Back Log	168	397	180	246	174	210
AG AMR						
Single Phasing						
Special Action Plan( Nandurbar)	11	9		4		1
Total Non DPR Schemes (b)	408	693	390	456	394	442
<b>Grand Total of DPR Schemes and Non-DPR Schemes (a)+(b)</b>	<b>3,349</b>	<b>4,447</b>	<b>4,099</b>	<b>4,115</b>	<b>3,077</b>	<b>3,594</b>

### *Commission's Analysis*

- 3.11.3 In response to the Commission's query regarding reconciliation of capitalisation as claimed in the Petition Forms vis-a-vis asset additions reported in the audited Annual Accounts, MSEDCL submitted that, as per Schedule 12 of the audited Accounts, the Addition to Gross Block during FY 2013-14 is Rs. 4573 Crore as against total capitalisation of Rs 4447 Crore reported in Form-4. In Form 4, MSEDCL has shown only Scheme-related capitalisation, whereas total capitalisation includes land and land rights, buildings, etc., i.e. an additional amount of Rs. 126 Crore as 'other adjustments' by the Corporate Office.
- 3.11.4 MSEDCL also clarified that certain items of General Assets, such as land & land rights, buildings, vehicles, furniture & fixtures, office equipments and other civil works, etc. which are not covered in any infrastructure schemes but are necessary for day-to-day business activities. Hence these items have been shown as 'other adjustments'. For assets capitalised but not forming part of any specific scheme, the Commission has followed its approach in previous Orders, which was based on the submissions made by MSEDCL. Accordingly, the Commission has considered

the capitalisation of Rs. 126 Crore only for the computation of depreciation, and has not considered it for the purpose of interest and RoE computation.

- 3.11.5 As regards DPR schemes, the Commission has verified these, and has disallowed capitalisation towards the following schemes in the respective years:

FY 2013-14

- 3.11.6 In reply to queries on the CBA, MSEDCL submitted the CBA for Schemes already capitalised in FY 2013-14. The Commission has perused the CBA reports.
- 3.11.7 As regards the scheme of 'Infra Plan Works', which involves infrastructure strengthening in various MSEDCL Divisions, the Commission had granted in-principle approval with the condition of reducing the Distribution Losses of each Divisions to a specific target level. As part of the CBA, MSEDCL has submitted the actual loss reduction achieved after implementation of the scheme till FY 2013-14. In many of the Divisions, MSEDCL has achieved the target Distribution Loss reduction. However, in 21 Divisions, the targets were not achieved. The details of Division-wise loss reduction target and actual achievement in these 21 Divisions, as submitted by MSEDCL, is shown in the Table below.

**Table 46: Division-wise Loss Reduction target Vs achievement, as submitted by MSEDCL**

Sr. No	Division	Existing Loss (as on approval)	Target as per MERC	Achievement FY13-14	% Losses over Target
1	Manchar	33.84%	20.83%	21.40%	1%
2	Jalna-II	28.30%	20.00%	36.07%	16%
3	Shahada	64.3%	26.79%	28.20%	1%
4	Akluj	23.4%	19.99%	20.14%	0%
5	Gadchiroli	41.26%	21.26%	21.91%	1%
6	MIDC Nagpur	0.92%	0.55%	2.50%	2%
7	Kalyan(E)	27.00%	8.40%	13.87%	5%
8	Kolhapur Urban	4.61%	3.58%	4.97%	1%
9	Karad	26.58%	12.88%	18.24%	5%
10	Malegaon UCR	52.26%	28.01%	36.57%	9%
11	Nadurbar	19.50%	12.20%	27.85%	16%
12	Wagle Estate	19.54%	7.72%	10.93%	3%
13	Karjat	34.70%	25.70%	27.64%	2%
14	Vashi	4.00%	3.80%	5.66%	2%
15	Ulhasnagar-I	37.20%	11.50%	14.76%	3%
16	Mulshi	15.10%	13.26%	16.38%	3%

Sr. No	Division	Existing Loss (as on approval)	Target as per MERC	Achievement FY13-14	% Losses over Target
17	Chiplun	20.00%	18.00%	18.44%	0%
18	Vasai	14.90%	12.60%	13.18%	1%
19	Kankavali	22.50%	20.00%	22.37%	2%
20	Ratnagiri	14.00%	12.80%	16.75%	4%
21	Akola (Urban)	32.70%	12.00%	27.92%	16%

3.11.8 Thus, the loss reduction targets have not been achieved in these 21 Divisions. Besides, in some Divisions like Jalna-II, MIDC Nagpur, Nandurbar, Vashi, Mulshi, and Ratnagiri, the loss level has increased as compared that prevalent at the time of grant of in-principle approval. MSEDCL has not submitted any reasons for non-achievement of targeted loss reduction. MSEDCL is directed to submit detailed justification for non-achievement of Distribution Loss reduction as was envisaged through implementation of these Infra Works schemes in these Divisions along with its truing up Petition at the end of the Control Period.

3.11.9 For the following DPR schemes, MSEDCL has claimed excess capitalisation over and above their approved cost, in FY 2013-14.

**Table 47: Excess Capitalisation claimed by MSEDCL in FY 2013-14 (Rs Crore)**

Major Schemes	Excess Capitalisation in FY 2013-14
Infra Plan Works	1,697
GFSS	231
DTC Metering Phase-III	12
SPA:PE (Release of Agri. Connection)	614
P:SI (Project for System Improvement)	40
P:IE(Project for Intensive Electrification)	83
<b>Total</b>	<b>2,676</b>

3.11.10 As per Regulation 27.2 of the MYT Regulations,

*“27.2 The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:*

*Provided that prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”*

3.11.11 Accordingly, the Commission asked MSEDCL to justify excess capitalisation towards these schemes. Considering the scheme-wise justification submitted, the Commission allows the excess capitalisation for FY 2013-14.

- 3.11.12 However, significant excess capitalisation is due to time over-run of the schemes, and excess interest was incurred which would have been capitalised as IDC. Due to excess capitalisation, an undue burden of excess IDC is also being passed on to consumers, which is not entirely justifiable. Accordingly, the Commission disallows 50% of IDC against such schemes with excess capitalisation.
- 3.11.13 MSEDCL has not furnished scheme-wise IDC computation figures, or any details of scheme-wise allocation of loans and phasing of expenditure, which is necessary for ascertaining scheme-wise excess capitalisation of IDC. However, MSEDCL has submitted that interest capitalisation during FY 2013-14 amounts to 3.15% of the total capitalised amount. Thus, for the purpose of estimation of IDC component included in the excess capitalisation of Rs. 2676 Crore for FY 2013-14, the Commission has considered the same ratio of 3.15%. Accordingly the derived IDC component of excess capitalisation works out to Rs. 84.44 Crore. The Commission has allowed only 50% of this IDC component amounting to Rs. 42.22 Crore.

**FY 2014-15 and FY 2015-16**

- 3.11.14 The Commission notes that MSEDCL is availing the feed-in tariff for the Deogad Wind Power Project, which is a DPR scheme, determined under the RE Tariff Regulations. This preferential tariff has already been factored in the recovery of capital cost of the Project. Hence, allowing capitalisation towards this scheme separately in the ARR would amount to allowing such recovery twice. Accordingly, the Commission disallows the capitalisation claimed by MSEDCL towards this scheme in FY 2014-15 and FY 2015-16, amounting to Rs. 31.5 Crore and Rs. 43.88 Crore respectively.

**Table 48: Capilisation disallowed for Deogad Wind Power Project (Rs. Crore)**

Schemes	FY 2014-15	FY 2015-16
Deogad Wind Power Project	31.5	43.88

- 3.11.15 MSEDCL has proposed to capitalise expenditure towards a few pilot DSM schemes during FY 2014-15 and FY 2015-16. However, in accordance with the DSM Regulations, 2010, the Commission considers it more appropriate to treat the expenditure on these schemes as revenue expenditure to be included as part of the ARR instead of allowing their capitalisation. Accordingly, the Commission has disallowed the capitalisation claimed towards these schemes, and allowed the amount as part of the ARRs for FY 2014-15 and FY 2015-16. The details of such schemes in FY 2014-15 and FY 2015-16 have been summarised below:

**Table 49: Schemes of revenue nature for which Capitalisation is disallowed, and added in ARR as revenue expense (Rs. Crore)**

Schemes	FY 2014-15	FY 2015-16
AG-DSM Pilot Project - Magalwedha Tal., Solapur Distt.	0.49	0.68
Star rated ceiling fan Phase-I	0.53	0.17
Star rated ceiling fan Phase-II		6.09
Solar AG Pump		1.50
<b>Total</b>	<b>1.02</b>	<b>8.44</b>

3.11.16 The Commission also observes that, in respect of the following DPR schemes, MSEDCL has claimed/proposed excess capitalisation over and above their in-principle approved cost in FY 2014-15 and FY 2015-16:

**Table 50: Excess Capitalisation claimed by MSEDCL in FY 2014-15 and FY 2015-16 (Rs Crore)**

Major Schemes	Excess Capitalisation in FY 2014-15	Excess Capitalisation in FY 2015-16	Total Excess Capitalisation
Infra Plan Works	341	110	451
P:SI (Project for System Improvement)	158		158
R-APDRP A (130 town)	67	68	135
RGGVY	73	116	189
Single Phasing - Left out villages	28	168	196
Other DPR Schemes	36	28	64
<b>Total</b>	<b>703</b>	<b>489</b>	<b>1,192</b>

3.11.17 As sought by the Commission, MSEDCL submitted its scheme-wise justification for excess capitalisation. As stated earlier, the Commission is of the view that since significant excess capitalisation is due to time over-run of the schemes, excess interest was incurred which would have been capitalised as IDC. At the same time, due to excess capitalisation, an undue burden of excess IDC is passed on to the consumers. While the Commission will undertake detailed scrutiny and prudence check of scheme-wise excess capitalisation, vis-a-vis the in-principle approvals granted, during truing up at the end of the Control Period, the Commission is provisionally allowing this capitalisation claimed for FY 2014-15 and FY 2015-16 but disallowing 50% of the IDC against such schemes.

3.11.18 As MSEDCL has claimed IDC as a fixed percentage (3.15%) of total capitalisation during the year without providing scheme-wise details, the Commission has



worked out the IDC on proportionate basis at the same rate for the respective years and disallowed 50% of the derived IDC for FY 2014-15 and FY 2015-16.

- 3.11.19 The capitalisation towards non-DPR schemes for FY 2013-14 to FY 2015-16 is well within the limit of 20% of DPR scheme capitalisation, and has accordingly been allowed.
- 3.11.20 Based on the above, the capitalisation allowed for FY 2013-14 to FY 2015-16 is as follows.

**Table 51: Capitalisation approved by Commission for FY 2013-14 to FY 2015-16 (Rs Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Excess Capitalisation	2676	703	489
50% of IDC @3.15% of capitalisation, for deduction	42	11	8
DPR Capitalisation disallowed	0	33	52
Total disallowance of capitalisation	42	44	60
Capitalisation claimed by MSEDCL	4,573	4,115	3,594
Less disallowance of capitalisation	(42)	(44)	(60)
Capitalisation allowed considering above disallowance	4,531	4,072	3,534
Capitalisation allowed towards schemes not forming part of any specific scheme	126		
Capitalisation considered for Funding Plan (Debt & Equity)	4,404	4,072	3,534

### 3.12 Depreciation

- 3.12.1 MSEDCL submitted that, in the past, it has been applying depreciation on Fixed Assets on the Straight Line Method up to 90% of the value of assets as per the rates notified by the Mop, GoI vide notification dated 29 March, 1994. These rates were applicable up to FY 2010-11. However, the Ministry of Corporate Affairs has issued a General Circular dated 31 May 2011 providing that, for Companies engaged in generation/supply of electricity, the rates of depreciation and methodology notified under the EA, 2003 will prevail over Schedule XIV to the Companies Act, 1956. Therefore, in FY 2011-12, MSEDCL has changed the methodology for calculation of depreciation, and started applying depreciation rates as specified in the Commission's Tariff Regulations, 2005. Depreciation has been calculated taking into consideration the opening balance of assets at the beginning of the year and the projected capitalisation during the year. The depreciation rates applied are as per the MYT Regulations, 2011. The estimated depreciation for the Control Period is shown in the following Table.

**Table 52: Depreciation as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14 (Actual)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Opening GFA	33,268	37,840	41,955
<b>Depreciation</b>	<b>1,859</b>	<b>2,088</b>	<b>2,289</b>

***Commission's Analysis***

- 3.12.2 In reply to a query, MSEDCL has confirmed that, while computing depreciation expenses for FY 2013-14 to FY 2015-16, assets are depreciated only to the extent of 90% of GFA. However, MSEDCL has expressed difficulty in complying with Regulation 31.2 (b) of the MYT Regulations regarding computation of depreciation at different rates (depending on the useful life of asset) beyond 70% of the depreciated assets. MSEDCL submitted that it is practically difficult to calculate the depreciation as per Regulation 31.2 (b) in the absence of a computerized system for the same. The implementation of ERP is under process, and MSEDCL may be able to calculate the depreciation as per the MYT Regulations once it is in place.
- 3.12.3 The Commission observes that the Opening GFA, as submitted by MSEDCL, for FY 2013-14 is different from the closing GFA approved under the Truing up Order for FY 2012-13 (Case No. 38 of 2014). MSEDCL has clarified that it has considered the Opening GFA as per the Annual Accounts. It stated that Commission had earlier approved capital expenditure and related expenses based on the opening GFA, opening balance of loan, and funding pattern for capital expenditure schemes, which were finalised after approving the capitalisation of 50% against DPR Schemes and 20% on Non DPR Schemes. Hence, the actual expenditure did not get reflected in the various Tariff Orders of Commission. Thus, the reason for the difference in the Opening GFA is due to disallowance of certain capitalisation in earlier Orders. For allowing depreciation for the Control Period, the Commission has considered the GFA as approved by it in earlier Orders and not considered the GFA as submitted by MSEDCL. Further, the additional impact of the difference in approved capitalisation for FY 2013-14 to FY 2015-16 is factored in while approving the GFA for these years in this Order.
- 3.12.4 The Commission observes that the depreciation as per the audited Accounts for FY 2013-14 is Rs 1676.80 Crore, as against Rs. 1859 Crore claimed by MSEDCL in its Petition. Upon enquiry, MSEDCL confirmed that the depreciation reported in the Annual Accounts is based on the rates stipulated in the MYT Regulations. Note-2 of the audited Accounts is reproduced as under.

***"5. Depreciation***

***...MERC has framed Multi Year Tariff (MYT) Regulations 2011 wherein the rates of depreciation of assets have been revised. The company has applied***

*the revised rates of depreciator w.e.f 01-04-2013, as MERC has given relaxation in implementing the MYT Regulations to the company for two years vide its order dated 23-08-2011.”*

- 3.12.5 In view of the above, the Commission has considered the asset class-wise depreciation quantum and rates as per the audited Accounts for FY 2013-14. However the Commission has revised this depreciation pro rata based on the approved Openin GFA for FY 2013-14 and the asset addition allowed during FY 2013-14. For subsequent years, depreciation has been provisionally allowed based on the revised GFA and capitalisation allowed in the respective years. However, this would be subject to prudence check and reviewed during the truing up exercise.
- 3.12.6 The Commission asked MSEDCL to submit the details of assets retired in the past and its projection for retirement of assets in FY 2014-15 and 2015-16. MSEDCL submitted that it is difficult to predict when an asset will become unserviceable and to project the value of such assets as may become unserviceable in future. This may happen due to sudden breakdowns or other unforeseeable reasons beyond its control. Therefore, MSEDCL has not projected the retirement of assets in FY 2014-15 and 2015-16. The Commission does not agree with MSEDCL's contention that it is not possible to project the retirement of assets. In fact, there are several schemes related to renovation and modernisation, life extension, etc., for distribution assets which are undertaken upon assessing the balance useful life and serviceability of particular assets. Hence, it would be possible to project the retirement of assets. The Commission directs MSEDCL to maintain in its Asset Register the details of useful life for each asset, and consider retirement of assets once it is over. The Commission shall consider the retirement of assets on actual basis at the time of true-up of the respective years.
- 3.12.7 Based on the above, the approved depreciation for FY 2013-14 to FY 2015-16 is summarised in the following Table.

**Table 53: Depreciation approved by the Commission for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particular	FY 2013-14	FY 2014-15	FY 2015-16
Opening GFA	31,974	36,504	40,576
Addition during the year	4,531	4,072	3,534
Retirement	(0.89)	0.00	0.00
Closing GFA	36,504	40,576	44,110
<b>Depreciation</b>	<b>1,611</b>	<b>1,940</b>	<b>2,134</b>

**3.13 Interest Expenses**

- 3.13.1 MSEDCL has considered the audited figures for outstanding loan at the beginning and end of the year, along with the interest paid during the year. Weighted average interest rate has been calculated considering the average of the outstanding loan and interest paid during the year.
- 3.13.2 Regulation 33 of the MYT Regulations specifies that the rate for calculation of interest on long-term loans shall be the weighted average rate of interest on the basis of the actual loan portfolio at the beginning of each year. Further, the interest should be calculated on the normative average loan availed in a particular year. Accordingly, MSEDCL has calculated the interest on long-term loans considering the weighted average rate of interest of 11.90% for FY 2014-15 and FY 2015-16.
- 3.13.3 Based on the above, MSEDCL has claimed the interest charges for 2013-14 to 2015-16 as tabulated below

**Table 54: Interest on Long-term Loans as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Outstanding Loan at Beginning of the year	13,749	12,778	13,708
Loan Drawal	888	3,018	2,008
Loan Repayment	1,859	2,088	2,289
Balance Outstanding at the End of the year	<b>12,778</b>	<b>13,708</b>	<b>13,427</b>
Interest Paid	1,578	1,576	1,615
Interest Capitalised	140	130	113
<b>Net Interest Paid</b>	<b>1,438</b>	<b>1,446</b>	<b>1,501</b>
Interest Rate	11.90%	11.90%	11.90%

- 3.13.4 MSEDCL has submitted that, for funding its capital expenditure, various sources of financing were relied upon, including Internal Accruals, GoM Equity, and GoM/GoI grants.

***Commission's Analysis***

- 3.13.5 The Commission has considered the funding pattern for capitalisation for FY 2013-14 in the same ratio as for the funding of capital expenditure, in line with the methodology adopted by MSEDCL, with adjustments for the approved quantum of capitalisation. The funding pattern thus arrived at for capitalisation based on the submissions by MSEDCL is shown below.

**Table 55: Funding of Capitalisation submitted by MSEDCL for FY 2013-14 (Rs. Crore)**

Particulars	Amount FY 2013-14	%
Total Capitalisation	4395.45	
Less: Consumer Contribution	415.96	
Less: Grants received during the year	523.60	
Capitalisation to be funded by debt & equity	3455.89	100%
Equity	2300.39	67%
Debt	1155.50	33%

3.13.6 As will be seen from the above Table, the equity claimed by MSEDCL has exceeded the normative level of 30%. In view of this, while approving the funding pattern, the Commission has limited the equity component to 30%, and the excess equity is considered as normative debt.

**Table 56: Funding of Capitalisation approved by Commission for FY 2013-14 (Rs. Crore)**

Particulars	Amount FY 2013-14	%
Total Capitalisation	4,404	
Less: Consumer Contribution	417	
Less: Grants received during the year	525	
Capitalisation to be funded by Debt and Equity	<b>3,463</b>	100%
Equity	1,039	30%
Debt	2,424	70%

3.13.7 Similarly, the funding pattern for FY 2014-15 and FY 2015-16 for the capitalisation provisionally approved by the Commission, in proportion to the funding pattern of capital expenditure adopted by MSEDCL and after considering the approved capitalisation for the respective years, is presented in the following Table. This would be subject to prudence check and reviewed during the truing up exercise at the end of the Control period.

**Table 57: Funding of capitalisation approved by Commission for FY 2014-15 and FY 2015-16 (Rs. Crore)**

Particulars	Amount FY 2014-15	%	Amount FY 2015-16	%
Total Capitalisation	4,072		3,534	
Less: Consumer Contribution	50		57	
Less: Grants received during the year	325		369	
Capitalisation to be funded by Debt	<b>3,697</b>	100%	<b>3,107</b>	100%

Particulars	Amount FY 2014-15	%	Amount FY 2015-16	%
& Equity				
Equity	700	19%	800	26%
Debt	2,997	81%	2,307	74%

3.13.8 For the approval of interest expenses, the debt component has been considered as approved in the above Table.

3.13.9 The rate of interest has been allowed as per Regulation 33 of MYT Regulations as 11.90%, as claimed by MSEDCL. Under the Regulations, the rate to be used for calculation of interest on long-term loans is the weighted average rate of interest on the basis of the actual loan portfolio at the beginning of each year. The same has been allowed accordingly.

3.13.10 The approved interest expenses for FY 2013-14 to FY 2015-16 is as shown below:

**Table 58: Approved Interest Expense for FY 2013-14 and FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MSEDCL	Approved	MSEDCL	Approved	MSEDCL	Approved
Outstanding Loan at beginning of the year	13,749	13,117	12,778	13,930	13,708	14,987
Loan Drawal	888	2,424	3,018	2,997	2,008	2,307
Loan Repayment	1,859	1,611	2,088	1,940	2,289	2,134
Balance Outstanding at the end of the year	12,778	13,930	13,708	14,987	13,427	15,160
Interest Paid	1,578	1,609	1,576	1,721	1,615	1,794
Interest Capitalised	140	140	130	130	113	113
<b>Net Interest Paid</b>	<b>1,438</b>	<b>1,469</b>	<b>1,446</b>	<b>1,591</b>	<b>1,501</b>	<b>1,680</b>
<b>Interest Rate</b>	<b>11.90%</b>	<b>11.90%</b>	<b>11.90%</b>	<b>11.90%</b>	<b>11.90%</b>	<b>11.90%</b>

### 3.14 Interest on Working Capital

3.14.1 Regulations 35.3 and 35.4 of the MYT Regulations specify the norms for IoWC for Wires and Supply Business during the Control Period. MSEDCL has submitted that it has computed the IoWC for Wires and Supply Business based on these Regulations.

3.14.2 Accordingly, the IoWC and interest on CSD for the Wires Business, as claimed by MSEDCL, is presented in the following Table.

**Table 59: Interest on Working Capital and Security Deposit for Wires Business, as submitted by MSEDCL (Rs. Crore)**

Particulars	MSEDCL		
	FY 2013-14	FY 2014-15	FY 2015-16
<b>Computation of Working Capital</b>			
One-twelfth of the amount of Operations and Maintenance Expenses	345	365	416
One-twelfth of the sum of the book value of stores, materials and supplies	56	58	61
Two months of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs	1597	1907	1856
<i>Less:</i>			
<b>Amount of Security Deposit</b>			
From Distribution System users	(545)	(600)	(660)
<b>Total Working Capital</b>	<b>1,452</b>	<b>1,731</b>	<b>1,674</b>
<b>Computation of working capital interest</b>			
Rate of Interest (% p.a.)	14.75%	14.75%	14.75%
<b>Interest on Working Capital</b>	<b>214</b>	<b>255</b>	<b>247</b>
<b>Interest on Security Deposit</b>			
Rate of Interest (% p.a.)	9%	9.00%	9.00%
<b>Interest on Security Deposit</b>	<b>49</b>	<b>54</b>	<b>59</b>
<b>Total</b>	<b>263</b>	<b>309</b>	<b>306</b>

- 3.14.3 MSEDCL submitted that, as per the MYT Regulations, the provision of reducing the working capital by the total amount of CSD is making the net working capital negative for the Supply Business. Therefore, the working capital requirement based on normative principles works out to zero. As per MSEDCL, the amount of CSD reflected in its books of accounts is just a notional amount. Although that amount is reflected in the Balance Sheet, in the Transfer Scheme MSEDCL has not physically received such deposits in cash from the erstwhile MSEB. However, as per the Audited Accounts, MSEDCL has paid IoWC. MSEDCL further submitted that the working capital is mainly required to meet liabilities relating to fuel and power purchase, and is beyond its reasonable control. Accordingly, MSEDCL has claimed the balance IoWC in Supply Business, i.e. IoWC as per audited Accounts less the IoWC claimed in Wires Business. That has been estimated by assuming an increase of 5% per annum for FY 2014-15 and FY 2015-16.
- 3.14.4 Out of the total CSD, MSEDCL has allocated 10% to Wires and 90% to the Supply Business. The same has been increased by 10% p.a. for FY 2014-15 and FY 2015-16. MSEDCL has calculated the interest on CSD at 9% per annum. However, as



regards interest on CSD for the Supply Business for FY 2013-14, MSEDCL has limited it as per the Audited Accounts (i.e. Interest on CSD as per audited accounts less the interest on CSD claimed in the Wires Business). The IoWC for the Retail Supply Business claimed by MSEDCL as shown below:

**Table 60: Interest on Working Capital and Security Deposit for Supply as submitted by MSEDCL (Rs. Crore)**

Particulars	MSEDCL		
	FY 2013-14	FY 2014-15	FY 2015-16
<b>Computation of Working Capital</b>			
One-twelfth of the amount of Operations and Maintenance Expenses	98	159	178
One-twelfth of the sum of the book value of stores, materials and supplies	6	6	7
Two months of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs	6,967	7,170	8,125
<i>Less:</i>			
Amount of Security Deposit from retail supply consumers	4,907	5,398	5,938
One month equivalent of cost of power purchased	2,790	3,386	3,701
<b>Total Working Capital</b>	<b>(625)</b>	<b>(1,448)</b>	<b>(1,329)</b>
<b>Computation of working capital interest</b>			
Rate of Interest (% p.a.)	14.75%	14.75%	14.75%
<b>Interest on Working Capital</b>	<b>75</b>	<b>79</b>	<b>83</b>
<b>Interest on Security Deposit</b>			
Rate of Interest (% p.a.)		9.00%	9.00%
<b>Interest on Security Deposit</b>	<b>378</b>	<b>486</b>	<b>534</b>
<b>Total (Supply)</b>	<b>453</b>	<b>564</b>	<b>617</b>

### *Commission's Analysis*

- 3.14.5 The Commission has reworked the IoWC in accordance with the norms specified in the MYT Regulations and based on the parameters such as O&M Expenses, Wires ARR and Supply ARR approved in this Order.
- 3.14.6 As regards MSEDCL's claim of working capital requirement being negative and, therefore, IoWC working out to be zero, the MYT Regulations stipulate that working capital interest has to be considered on a normative basis. In its Judgement in Appeal no. 227 of 2012 & IA no. 20 of 2014 dated 30 May, 2014, the ATE has upheld the decision of the Commission in its previous Orders, as follows:



*“Interest on working capital: The contention of the Appellant regarding deduction of consumer security deposit from the working capital requirement is rejected as it is inconsistent with the Tariff Regulations and the consumers cannot be burdened on this account especially as they had deposited the security with the erstwhile Electricity Board which is reflected in the books of accounts of the Appellant.” In view of the above, the Commission has continued to allow the interest on working capital on normative basis.”*

3.14.7 As regards the rate for computing the interest on CSD for FY 2015-16, the Commission notes that MSEDCL has considered it as 9.00%, based on the RBI Bank Rate prevailing at the time of filing of the MYT Petition in December, 2014. However, MSEDCL filed its revised Petition on 3 February, 2015, which was admitted by the Commission on 13 February, 2015, when the RBI Bank Rate was 8.75%. Accordingly, for computing the interest on CSD, the Commission has considered this rate of 8.75% for FY 2015-16.

3.14.8 The IoWC approved by the Commission for FY 2013-14 to FY 2015-16 is as shown below:

**Table 61: Interest on Working Capital and Security Deposit for Wires, approved by Commission (Rs. Crore)**

Particulars	Approved		
	FY 2013-14	FY 2014-15	FY 2015-16
<b>Computation of Working Capital</b>			
One-twelfth of the amount of Operations and Maintenance Expenses	310	343	386
One-twelfth of the sum of the book value of stores, materials and supplies	56	58	61
Two months of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs	1,331	1,474	1,639
<i>Less:</i>			
<b>Amount of Security Deposit</b>			
From Distribution System users	(545)	(600)	(660)
<b>Total Working Capital</b>	<b>1,152</b>	<b>1,276</b>	<b>1,426</b>
<b>Computation of working capital interest</b>			
Rate of Interest (% p.a.)	14.75%	14.75%	14.75%
<b>Interest on Working Capital</b>	<b>170</b>	<b>188</b>	<b>210</b>
<b>Interest on Security Deposit</b>			
Rate of Interest (% p.a.)	9.00%	9.00%	8.75%
<b>Interest on Security Deposit</b>	<b>49</b>	<b>54</b>	<b>58</b>
<b>Total (Wires)</b>	<b>219</b>	<b>242</b>	<b>268</b>

**Table 62: Interest on Working Capital and Security Deposit for Supply approved by Commission (Rs. Crore)**

Particulars	Approved		
	FY 2013-14	FY 2014-15	FY 2013-14
<b>Computation of Working Capital</b>			
One-twelfth of the amount of Operations and Maintenance Expenses	140	159	178
One-twelfth of the sum of the book value of stores, materials and supplies	6	6	7
Two months of the expected revenue from sale of electricity at the prevailing tariffs	7,233	7,788	8,246
<i>Less:</i>			
Amount of Security Deposit from retail supply consumers	(4,907)	(5,398)	(5,938)
One month equivalent of cost of power purchased	(2,827)	(3,308)	(3,437)
<b>Total Working Capital</b>	<b>(355)</b>	<b>(752)</b>	<b>(944)</b>
<b>Computation of working capital interest</b>			
Rate of Interest (% p.a.)	14.75%	14.75%	14.75%
<b>Interest on Working Capital</b>	Nil	Nil	Nil
<b>Interest on Security Deposit</b>			
Rate of Interest (% p.a.)		9.00%	8.75%
<b>Interest on Security Deposit</b>	<b>378</b>	<b>486</b>	<b>520</b>
<b>Total (Supply)</b>	<b>378</b>	<b>486</b>	<b>520</b>

### 3.15 Other Finance Charges

- 3.15.1 MSEDCL submitted that Other Finance Charges, including guarantee charges, Finance Charges, Stamp Duty and service fee, i.e. fund-raising charges, have been projected considering an escalation of 10% per year. Since GoM is not giving any further guarantees, the same level of guarantee fees has been projected for FY 2014-15 to FY 2015-16. Considering the new Letters of Credit required to be given to power suppliers and the increase in the quantum of available power, the Finance Charges have been projected with a 10% increase per annum. Further, considering the impact of the Bombay Stamp Act, 1958 on new documentation for availing long-term loans and working capital finance, 10% increase per annum has been considered for projections of Stamp Duty. Similarly, considering the historical experience, MSEDCL has considered 10% increase per annum for service fees. On this basis, MSEDCL has claimed Other Finance Charges of Rs. 412 Crore, Rs. 1571 Crore and Rs. 39 Crore for FY 2013-14, FY 2014-15 and FY 2015-16 respectively.

- 3.15.2 MSEDCL submitted that the other Interest and Charges include provision for late payment surcharge payable to MSPGCL amounting to Rs. 376 Crore for FY 2013-14. MSEDCL has included Rs. 1532 Crore towards Interest to Suppliers/ Contractors for FY 2014-15. An amount of Rs. 4 Crore is also estimated for both years towards interest on deposits from bill collection agencies, collection from consumers through collecting agencies being a normal and continuing activity.

***Commission's Analysis***

- 3.15.3 The Commission has verified guarantee charges, Finance Charges and Stamp Duty with the audited Accounts, and found these to be in order for FY 2013-14. The Commission also accepts MSEDCL's projections for these items in FY 2014-15 and FY 2015-16.
- 3.15.4 As regards late payment surcharge (or delayed payment charges (DPC)), MSEDCL submitted that DPC generally arises due to delays in obtaining approval for expenses payable to MSPGCL, and certain other items of cost and revenue which were approved later following the result of review before the Commission or an ATE Judgement. Therefore, MSEDCL requested the Commission to approve the provision for DPC payable to MSPGCL and other suppliers/ contractors. As sought by the Commission, MSEDCL submitted the following break-up of DPC amounting to Rs. 1532 Crore for FY 2014-15.

**Table 63: Break-up of DPC in FY 2014-15 submitted by MSEDCL**

Supplier	FY 2014-15
MSPGCL	750
Adani Power	160
India Bulls Power	33
JSW Energy	51
Emco Energy Ltd.	2
MSETCL-STU	535
<b>Total</b>	<b>1,532</b>

- 3.15.5 The Commission notes that such charges are on account of delay in payment of costs such as for power purchase cost or Transmission Charges, which are cost components allowed to MSEDCL for recovery through the approved ARR and tariff. It would be expected that, with better cash-flow management, such expenses could have been avoided if timely actions were taken by MSEDCL. Hence, the Commission does not find any merit or justification in allowing such penal costs to be passed on to consumers.
- 3.15.6 The Commission is deeply concerned about the persistent delays in payments by MSEDCL, reflected by unacceptably large and mounting DPC liabilities which MSEDCL itself has to bear. Such payment delays also jeopardise the finances and working of the Transmission Licensees and the private and public Utilities

providing power to MSEDCL, which are critical for its own functions. The Commission has dealt with the issue of delay in payment of Transmission Charges by Transmission System Users (TSUs) in its Order in Case No. 57 of 2015. In that Order, the Commission has issued directions to State Transmission Utility to approach the Commission, with its suggestions for dealing with past payment arrears and minimising future delays, through a Petition. In case of Generating Companies, the PPAs provide for payment security mechanism. The Commission directs MSEDCL to submit the status of operationalisation of such payment security mechanisms under the PPAs with its next Tariff Petition.

- 3.15.7 In view of the above, the Commission has disallowed the DPC components claimed by MSEDCL as ‘other charges’ for FY 2013-14 and FY 2014-15.
- 3.15.8 Accordingly, the Other Finance Charges approved by the Commission for FY 2013-14 to FY 2015-16 are as shown below:

**Table 64: Other Finance Charges for FY 2013-14 to FY 2015-16  
approved by Commission (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Guarantee Charges	7	7	7
Finance Charges	21	22	23
Stamp Duty	2	2	2
Service Fee (Fund-raising charges)	2	2	2
Other Interest and Charges	4	4	4
<b>Total Other Finance Charges</b>	<b>36</b>	<b>38</b>	<b>39</b>

### 3.16 Return on Equity

- 3.16.1 MSEDCL has claimed RoE in accordance with Regulation 32.2 of the MYT Regulations. The return on equity capital is allocated in the proposed ratio of Fixed Assets between the Wires and Retail Supply Business, i.e. 90% to Wires Business and 10% to Supply Business, in accordance with the allocation ratio approved in the Business Plan Order in Case No. 134 of 2012. Therefore, the capital expenditure, grants, equity and capitalisation is divided into Wires and Supply Business in the ratio of 90:10. Based on this, MSEDCL has claimed for RoE for the Wires and Supply Businesses separately.
- 3.16.2 The RoE for Wires Business has been computed by MSEDCL at the rate of 15.5% on the average equity based on the opening balance of equity and normative additions during the year, which has been arrived at by considering 30% of the net capital expenditure (net of consumer contribution and grants as funded from equity). Accordingly, the RoE for Wires Business claimed by MSEDCL is as under:

**Table 65: Return on Equity (Wires) claimed by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

S. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
		Actual	Projected	Projected
1	Regulatory Equity at the beginning of the year	7,377	8,437	9,074
2	Capital Expenditure incurred (excl Grants)	2,662	3,395	2,480
3	Equity portion of capital expenditure	1,582	634	627
4	% of Equity portion of capital expenditure	59.43%	18.68%	25.29%
5	Assets Capitalisation	3,534	3,408	2,897
6	Equity portion of Assets Capitalisation (computed at the rate of % as per Sr. No. 4 or limited to 30% Asset Capitalisation of as per Norm)	1,060	637	733
7	<b>Regulatory Equity at the end of the year</b>	<b>8,437</b>	<b>9,074</b>	<b>9,807</b>
8	<b>Return on Equity Computation</b>			
9	Return on Regulatory Equity at the beginning of the year - 15.5%*(1)	1,143	1,308	1,406
10	Return on Normative Equity portion of Asset Capitalisation - 15.5%*(6)/2	82	49	57
11	Interest on Equity portion above 30%	124	124	124
12	<b>Total Return on Regulatory Equity (Wires)</b>	<b>1,349</b>	<b>1,481</b>	<b>1,587</b>

3.16.3 The RoE for Supply Business has been computed by MSEDCL at the rate of 17.5% on the average equity considering the opening balance of equity and normative additions during the year, and has been arrived at by considering 30% of the net capital expenditure (net of consumer contribution and grants as funded from equity). Accordingly, the RoE for the Retail Supply Business claimed by MSEDCL is as under:

**Table 66: Return on Equity (Supply) claimed by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

S. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
		Actual	Projected	Projected
1	Regulatory Equity at the beginning of the year	820	937	1,008
2	Capital Expenditure incurred (excl Grants)	296	377	276
3	Equity portion of capital expenditure	176	70	70
4	% of Equity portion of capital expenditure	59.43%	18.68%	25.29%
5	Assets Capitalisation	393	379	322
6	Equity portion of Assets Capitalisation	118	71	81
7	<b>Regulatory Equity at the end of the year</b>	<b>937</b>	<b>1,008</b>	<b>1,090</b>
8	<b>Return on Equity Computation</b>			
9	Return on Regulatory Equity at the beginning of the year - 17.5%*(1)	143	164	176

S. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
		Actual	Projected	Projected
10	Return on Normative Equity portion of Asset Capitalisation - $17.5\% \times 30\% \times (5)/2$	10	6	7
11	Interest on Equity portion above 30%	14	14	14
<b>12</b>	<b>Total Return on Regulatory Equity (Supply)</b>	<b>168</b>	<b>184</b>	<b>197</b>

### *Commission's Analysis*

- 3.16.4 The Commission has approved the funding pattern based on approved capitalisation for FY 2013-14 to FY 2015-16 as discussed in the earlier Section on interest expenses.
- 3.16.5 The regulatory equity approved by the Commission at the end of FY 2012-13 in Case No. 38 of 2014 has been taken as the opening regulatory equity for FY 2013-14. In accordance with Regulation 30 of the MYT Regulations, equity contribution in excess of the norm of 30% of the allowed capitalised amount has been treated as a normative loan, and the interest on such loan has been allowed provisionally. Similarly, the opening equity for FY 2014-15 and FY 2015-16 have been considered as the approved closing equity of the preceding year. Based on the above, and considering the approved allocation ratio for equity between the Wires and Supply Businesses, the Commission has approved the RoE for them as summarised in the following Tables. However, these same would be subject to prudence check and reviewed during the truing up exercise.

**Table 67: Return on Equity (Wires) for FY 2013-14 to FY 2015-16 approved by Commission (Rs. Crore)**

S. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Regulatory Equity at the beginning of the year	6,845	7,780	8,410
2	Equity portion of Assets Capitalisation	935	630	720
3	<b>Regulatory Equity at the end of the year</b>	<b>7,780</b>	<b>8,410</b>	<b>9,131</b>
4	<b>Return on Equity Computation</b>			
5	Return on Regulatory Equity at the beginning of the year - $15.5\% \times (1)$	1,061	1,206	1,304
6	Return on Normative Equity portion of Asset Capitalisation – $[15.5\% \times (2)] / 2$	72	49	56
<b>7</b>	<b>Total Return on Regulatory Equity</b>	<b>1,133</b>	<b>1,255</b>	<b>1,359</b>

**Table 68: Return on Equity (Supply) for FY 2013-14 to FY 2015-16 approved by Commission (Rs. Crore)**

S.No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Regulatory Equity at the beginning of the year	761	864	934
2	Equity portion of Assets Capitalisation	104	70	80
3	<b>Regulatory Equity at the end of the year</b>	<b>864</b>	<b>934</b>	<b>1,015</b>
4	<b>Return on Equity Computation</b>			
5	Return on Regulatory Equity at the beginning of the year - 17.5% x (1)	133	151	164
6	Return on Normative Equity portion of Asset Capitalisation – [17.5% x (2)] / 2	9	6	7
7	<b>Total Return on Regulatory Equity</b>	<b>142</b>	<b>157</b>	<b>171</b>

**3.17 Provision for Bad Debts**

- 3.17.1 MSEDCL has claimed provisioning towards Bad Debts for FY 2013-14 to FY 2015-16 in line with Regulations 78.6 and 92.9 of the MYT Regulations. These stipulate that provision for Bad and Doubtful Debts may be allowed up to 1.5% of the receivables as per the Audited Annual Accounts, duly allocated for Wires and Supply Business. Further, the provision for Bad and Doubtful Debts has been allocated in the ratio of 10% to Wires Business and 90% to Supply Business by MSEDCL based on the allocation ratio approved in the Business Plan Order.
- 3.17.2 MSEDCL has considered the provision for Bad and Doubtful Debts as 1.5% of the last audited receivables for FY 2013-14 for the second Control Period as given below:

**Table 69: Provision for Bad Debts for Supply Business as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Receivables	21,153	21,153	21,153
Provisioning for Bad & Doubtful Debts during the year (Supply Business )	317	317	317

**Table 70: Provision for Bad Debts for Wires Business as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14 (Actual)	FY 2013-14 (Projected)	FY 2014-15 (Projected)
Receivables	2,350	2,350	2,350
Provisioning for Bad & Doubtful Debts during the year (Wires Business )	35	35	35



**Commission's Analysis**

- 3.17.3 As regards FY 2013-14, the Commission has verified the amount of receivables from the Audited Accounts. The total receivables in FY 2013-14 as per the Audited Accounts are Rs. 15432 Crore, as against Rs. 23503 Crore claimed by MSEDCL. These receivables of Rs 15432 Crore include a component of 'receivable on account of GoM Subsidy for consumers' amounting to Rs. 1448.16 Crore. Section 65 of EA, 2003 specifies that the Licensee will have to be paid an equivalent amount in advance in case the Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the Commission. Accordingly, any amount due towards tariff subsidy from GoM cannot be considered as a part of receivables. Hence, the Commission has not considered it for working out the amount of receivables for the purpose of provisioning for Bad Debts. The components of receivables as per the Audited Accounts as considered by the Commission are as under:

**Table 71: Receivables as per Audited Accounts for FY 2013-14**

Heads in Audited A/c	Reference	FY 2013-14 (Rs. Crore)
Total Trade Receivables (excluding amount on account of GoM subsidy)	Note-17	10,153.11
Long-term trade Receivables	Note-15	3,830.26
<b>Total Receivables</b>		<b>13,983.37</b>

- 3.17.4 Based on the above receivables, the Commission has computed the provisioning for Bad Debts to be allowed for FY 2013-14 to FY 2015-16 as shown below:

**Table 72: Provision for Bad Debts for Wires and Supply Business for FY 2013-14 to FY 2015-16, approved by Commission (Rs. Crore)**

Particulars		Approved		
		FY 2013-14	FY 2014-15	FY 2015-16
Amounts shown as Receivables in Audited Accounts	(a)	13,983	13,983	13,983
<b>Provisioning for bad &amp; doubtful debts during the year at the rate of 1.5% of (a)</b>	<b>(b) = 1.5% of (a)</b>	<b>210</b>	<b>210</b>	<b>210</b>
Provisioning for bad & doubtful debts during the year for Wires Business	(c) = 10% of (b)	21	21	21



Particulars		Approved		
		FY 2013-14	FY 2014-15	FY 2015-16
Provisioning for bad & doubtful debts during the year for Supply Business	(d) = 90% of (b)	189	189	189

### 3.18 Other Expenses

- 3.18.1 MSEDCL has claimed 'Other Expenses' comprising interest to suppliers/contractors, rebate to consumers and other expenses, viz. compensation for injuries to staff and outsiders. It has provided the break-up these expenses, which is as shown below:

**Table 73: Other Expenses for Wires and Supply Business for FY 2013-14 to FY 2015-16 submitted by MSEDCL**

Particulars	Second Control Period		
	FY 2013-14	FY 2014-15	FY 2015-16
	Actual	Projected	Projected
Compensation for injuries, death to staff	2	2	2
Compensation for injuries, death to others	7	7	7
Loss on obsolescence of fixed Assets	70	73	77
Intangible assets written-off	11	11	12
Interest on FAC write-off, DPC of Abhay Yojana	167	-	-
<b>Total Other Expense</b>	<b>256</b>	<b>93</b>	<b>98</b>

#### *Commission's Analysis*

- 3.18.2 The Commission asked MSEDCL to justify the account head and amount on "Loss on obsolescence of fixed Assets" considered for FY 2013-14 to FY 2015-16, particularly since there no such expense in FY 2012-13. MSEDCL submitted that, in view of the accounting principles and considering the Statutory Auditor's qualification in FY 2012-13, the accounting policy has changed in FY 2013-14 for recognising loss to WIP, Fixed Assets and stock on account of flood/ cyclone / obsolescence, etc. On the basis of available information, provision for the purpose has been made in FY 2013-14. A normal increase of 5% per year has been estimated in FY 2014-15 and 2015-16.
- 3.18.3 As regards justification sought on the head 'Interest on FAC write-off, DPC of Abhay Yojana', MSEDCL submitted that under the Abhay Yojna declared by GoM, specified consumers were allowed to pay 50% of arrears as on 31 March, 2014, whereupon interest and DPC on arrears were waived. The Abhay Yojna was

not in existence in FY 2012-13. The account head will be shown as and when the Abhay Yojna is in vogue.

- 3.18.4 As regard the expenses on account of “Loss on obsolescence of fixed Assets” during FY 2013-14, the Commission has verified these from the Audited Accounts and allowed them as claimed by MSEDCL. In its reply regarding retirement of assets, MSEDCL had contended that it is difficult to predict when an asset item would become unserviceable, and to project the value of such assets as might become unserviceable in future. Thus, MSEDCL has not projected asset retirement for future years. Therefore, the expense projections made by MSEDCL towards “Loss on obsolescence of fixed Assets” is without proper justification. Further during FY 2012-13, MSEDCL has not claimed any expense on account of “Loss on obsolescence of fixed Assets”, which also implies that such expenses is not incurred every year. In view of this, the Commission provisionally disallows the expense projection by MSEDCL under this head. It will be considered on actuals during the truing up for these years, subject to prudence check.
- 3.18.5 As regards the expense on account of ‘Interest on FAC write-off, DPC of Abhay Yojana’, the Commission notes observes that it is in the nature of write-off of Bad Debts, for which it is already allowing provisioning expenses in accordance with Regulations 78.6 and 92.9. In view of this, the Commission disallows this expenditure under the head ‘other expenses’.
- 3.18.6 Accordingly, the Commission has allowed ‘other expenses’ for FY 2013-14 to FY 2015-16 as under:

**Table 74: Other Expenses for FY 2013-14 to FY 2015-16 approved by Commission (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Other Expenses	89	20	21

### 3.19 Income Tax

- 3.19.1 MSEDCL stated that it has claimed Income Tax in accordance with Regulation 34 of the MYT Regulations. Accordingly, it has considered Income Tax of Rs. 103 Crore for each of the years FY 2013-14 to FY 2015-16 as per the latest Audited Accounts for FY 2013-14. The Income Tax has been allocated to Wires Business and Supply Business in proportion to the allocation approved by the Commission for Income Tax, i.e., 90% to Wires Business and 10% to Supply Business. The Income Tax claimed by MSEDCL for its Wires Business and Supply Business is shown below.

**Table 75: Income Tax claimed by MSEDCL for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Income Tax (Wires)	93	93	93
Income Tax (Supply)	10	10	10
<b>Income Tax (Total)</b>	<b>103</b>	<b>103</b>	<b>103</b>

**Commission's Analysis**

- 3.19.2 In respect of provisioning for Income Tax, Regulation 34 of the MYT Regulations stipulates as under:

*“34.1 The Commission, in its MYT Order, shall provisionally approve Income Tax payable for each year of the Control Period, if any, based on the actual income tax paid on permissible return as allowed by the Commission relating to the electricity business regulated by the Commission, as per latest Audited Accounts available for the applicant, subject to prudence check:*

*Provided that no Income Tax shall be considered on the amount of efficiency gains and incentive earned by the Generating Companies, Transmission Licensees and Distribution Licensees.*

*Provided further that the Generating Company, Transmission Licensee and Distribution Licensee shall bill the Income Tax under a separate head called "Income Tax Reimbursement" in their respective bills.*

*34.2 Variation between Income Tax actually paid and approved, if any, on the income stream of the regulated business of Generating Companies, Transmission Licensees and Distribution Licensees shall be reimbursed to/recovered from the Generating Companies, Transmission Licensees and Distribution Licensees, based on the documentary evidence submitted at the time of Mid-term Performance Review and MYT Order of third Control Period, subject to prudence check.”*

- 3.19.3 In line with the above provision, the Commission has verified the actual Income Tax paid by MSEDCL during FY 2013-14, the latest year for which audited accounts are available. The Commission observes that MSEDCL has paid a total tax of Rs. 103.19 Crore, as follows:

**Table 76: Income Tax claimed by MSEDCL during FY 2013-14**

Income Tax Heads	Rs. Crore
Income Tax for current year	0.04
Income Tax for previous year	103.14
<b>Total Income Tax</b>	<b>103.19</b>

- 3.19.4 Thus, out of the total Income Tax of Rs 103.19 Crore during FY 2013-14, Rs. 103.14 Crore pertains to the previous years' assessments, and the stand-alone Income Tax for FY 2013-14 is only Rs. 0.04 Crore. Since the actual Income Tax paid during FY 2013-14 was Rs. 103.19 Crore, that has been approved. However, for the projection of Income Tax for FY 2014-15 and FY 2015-16, the Commission has only considered Rs. 0.04 Crore as allowable, in accordance with Regulation 34 of the MYT Regulations.
- 3.19.5 Accordingly, the Income tax approved by the Commission is as shown below:

**Table 77: Income Tax for FY 2013-14 to FY 2015-16**  
**approved by Commission (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Income Tax (Wires)	92.87	0.04	0.04
Income Tax (Supply)	10.32	0.00	0.00
<b>Income Tax (Total)</b>	<b>103.19</b>	<b>0.04</b>	<b>0.04</b>

### 3.20 Contribution to Contingency Reserve

3.20.1 MSEDCL submitted that, considering its precarious financial condition and inavailability of sufficient funds to discharge its various liabilities, it had not been feasible for it to invest in Contingency Reserves in FY 2013-14. Accordingly, MSEDCL has not claimed it in the ARR.

3.20.2 However, MSEDCL has claimed the contribution to Contingency Reserve for FY 2014-15 and FY 2015-16 as per Regulation 36.1 of the MYT Regulations. It has estimated the contribution as 0.25% of the estimated opening balance of GFA of the respective years.

#### *Commission's Analysis*

3.20.3 Regulation 36.1 of the MYT Regulations provides for appropriation to Contingency Reserve, and reads as follows:

*"...36.1 Where the Transmission Licensee or Distribution Licensee has made an appropriation to the Contingency Reserve, a sum not less than 0.25 per cent and not more than 0.5 per cent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of aggregate revenue requirement:*

*Provided that where the amount of such Contingencies Reserves exceeds five (5) per cent of the original cost of fixed assets, no such appropriation shall be allowed which would have the effect of increasing the reserve beyond the said maximum:*

*Provided further that the amount so appropriated shall be invested in securities authorised under the Indian Trusts Act, 1882 within a period of six months of the close of the financial year..."*

3.20.4 The Commission has noted MSEDCL's submission that no investments have been made in FY 2013-14. For FY 2014-15 and FY 2015-16, it has claimed contribution to Contingency Reserve. Subsequently, MSEDCL has confirmed that it has not made any investment towards Contingency Reserve in FY 2014-15. Hence, the Commission has not considered any provision towards Contingency Reserve for FY 2014-15. However, this would be considered at the time of truing up, subject to prudence check. For FY 2015-16, the Commission has allowed contribution to Contingency Reserve as 0.25 % of the revised opening GFA approved by the Commission.

- 3.20.5 The expenses towards contribution to Contingency Reserve are allocated in the ratio of Fixed Assets as between the Wires and Retail Supply Business, i.e., 90% to Wires Business and 10% to Supply Business, as approved in the Business Plan.
- 3.20.6 The approved expense towards contribution to Contingency Reserve for FY 2013-14 to 2015-16 is as shown below.

**Table 78: Contribution to Contingency Reserve approved by Commission (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Contribution to Contingency Reserve (Wires)	-	-	91
Contribution to Contingency Reserve (Supply)	-	-	10
Contribution to Contingency Reserve (Wires+Supply)	-	-	101

### 3.21 Incentives and Discounts

- 3.21.1 MSEDCL has submitted that, in FY 2013-14, it has paid Rs. 219 Crore of incentives/discounts to consumers for timely payment of bills. These are projected considering a nominal rise of 5% over the previous year.

#### *Commission's Analysis*

- 3.21.2 The amount claimed towards incentives and discounts for FY 2013-14 has been verified with the Audited Accounts for FY 2013-14.
- 3.21.3 The Commission has accepted MSEDCL's submission, and provisionally approves a 5% escalation year-on-year over the approved amount of incentives and discounts for FY 2013-14. The incentives and discounts approved for FY 2014-15 and FY 2015-16 is as shown below, subject to truing up at the end of Control Period after prudence check.

**Table 79: Incentive and Discounts approved by Commission (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Incentives and Discounts	219	230	242

### 3.22 Prior Period Expenses

- 3.22.1 MSEDCL submitted that the net Prior Period Expenses debited in FY 2013-14 is Rs. 739 Crore. It clarified that the prior period items as defined in the AS (Accounting Standards) - 5 are items of income or expenses which arise in the current period as result of errors or omissions in the financial statements of one or more prior periods. Further, even though the expenses claimed are prior period items, since they have been accounted for in the books of account in FY 2013-14, they have been claimed by MSEDCL for that year.
- 3.22.2 MSEDCL submitted the break-up of Prior Period Expenses as shown below:

**Table 80: Break-up of Prior Period Expenses for FY 2013-14 as submitted by MSEDCL (Rs. Crore)**

S. No.	Particulars	Amount
	<b>Income relating to previous year</b>	
i	Receipts from Consumers	187
ii	Interest Income	0
iii	Excess provision for Depreciation	26
iv	Excess provision for Interest and Finance Charges	17
v	Other Excess Provision	9
vi	Other Income	66
	<b>Sub-total (a)</b>	<b>306</b>
	<b>Expenses/Losses relating to Previous Year</b>	
vii	Short provision for Power Purchase	39
viii	Operating expenses	72
ix	Employees Costs	14
x	Depreciation under provided	80
xi	Interest & Other Charges	310
xii	Administration Expenses	6
xiii	Material Related Expenses	28
xiv	Adjustment to Past billing	573
	<b>Sub-total (b)</b>	<b>1,045</b>
	<b>Net Prior Period Expenditure (b-a)</b>	<b>739</b>

**Commission's Analysis**

3.22.3 As sought by the Commission, MSEDCL provided the following brief descriptions and sub-components of the Prior Period Expenses claimed as follows:

*“Prior period items as defined in the AS - 5 are the items of income or expenses which arise in the current period as result of errors or omissions in the preparation of the financial statements of one or more prior periods.*

*Firstly, it includes adjustment to past billing due to revision of consumer bills amounting to Rs. 386.16 crores. Adjustment to the past billing of the consumer is carried out when consumer approaches with the complaint regarding billing. When this adjustment is with reference to the billing period prior to the respective financial year for which the accounts are prepared, it is booked as a prior period expenditure as per the Accounting Standard - 5 issued by the Institute of Chartered Accountants of India.*

*Secondly, it includes an amount of Rs. 290.03 crores booked towards the amount of late payment surcharge payable to MSPGCL for the period prior to FY 2013-14*

*Apart from above, there are various types of miscellaneous expenses in the nature of prior period which are briefed as under –*

- *Excess / Short provision of depreciation – The amount of depreciation charged excess / short in the earlier period at field offices which has been rectified in the current financial year.*
  - *Excess / Short provision of Interest & Finance Charges – The amount of interest payable on loans, consumers deposit etc. charged excess / short in the earlier period at field offices which has been rectified in the current financial year.*
  - *Operating expenses, Employee cost, administration expenses, material related expenses are such expenses which were remained to be provided for the earlier years but the same has been booked in the current financial year.*
- 3.22.4 MSEDCL has clarified that most of the amount pertains to the previous financial year.
- 3.22.5 As mentioned earlier, MSEDCL has expressed difficulties in submitting reconciliation of capitalisation and corresponding loan and equity adjusted for prior periods. The capitalisation and corresponding depreciation is approved by the Commission for every year based on prudence check and the provisions of the Regulations. Accordingly, the Commission has not considered the claim of MSEDCL for any excess or short provision of depreciation and interest for the past period. The Commission has also not accepted the claim for prior period Operating, R&M and administrative expenses as they are controllable factors which have been approved in previous Tariff Orders as per the principles set out therein.
- 3.22.6 Based on MSEDCL's reply to a related query, the Commission notes that a net Prior Period Expense (net of interest income and expense) of Rs. 290 Crore pertains to the DPC charges, which the Commission is disallowing as explained in the Section on 'other charges'. In view of this, the expense claimed under this head as part of Prior Period Expense is disallowed by the Commission.
- 3.22.7 The following Table summarises the Prior Period Expenses as approved by the Commission for FY 2013-14.

**Table 81: Prior Period Expenses for FY 2013-14 (Rs. Crore)**

Sr. No.	Particulars	MSEDCL	Approved
	<b>Income relating to previous year</b>		
i	Receipts from Consumers	187	187
ii	Interest Income	0	0
iii	Excess provision for Depreciation	26	0
iv	Excess provision for Interest and Finance Charges	17	0
v	Other Excess Provision	9	9
vi	Other Income	66	66
	<b>Sub-total (a)</b>	<b>306</b>	<b>262</b>
	<b>Expenses/Losses relating to Previous Year</b>		



Sr. No.	Particulars	MSEDCL	Approved
vii	Short provision for Power Purchase	-39	-39
viii	Operating expenses	72	0
ix	Employees Costs	14	0
x	Depreciation under provided	80	0
xi	Interest & Other Charges	310	0
xii	Administration Expenses	6	0
xiii	Material Related Expenses	28	0
xiv	Adjustment to Past billing	573	573
	<b>Sub-total (b)</b>	<b>1,045</b>	<b>534</b>
	<b>Net Prior period expenditure (b-a)</b>	<b>739</b>	<b>272</b>

### 3.23 DSM Expenses

#### *Commission's Analysis*

- 3.23.1 A few DSM schemes which are in the nature of revenue expenditure have been claimed by MSEDCL while claiming capitalisation during FY 2014-15 and FY 2015-16. However, in accordance with the DSM Regulations, 2010, the Commission has not considered their capitalisation, but is allowing it as revenue expenditure in the ARR for FY 2014-15 and FY 2015-16. These schemes are as shown below:

**Table 82: Expenditure on DSM Schemes allowed as part of ARR (Rs. Crore)**

Schemes	FY 2014-15	FY 2015-16
AG-DSM Pilot Project in Magalwedha Solapur	0.49	0.68
Star rated ceiling fan Phase-I	0.53	0.17
Star rated ceiling fan Phase-II		6.09
Solar AG Pump		1.50
<b>Total</b>	<b>1.02</b>	<b>8.44</b>

### 3.24 Regulatory Liability Charge Refund

- 3.24.1 MSEDCL has estimated the Regulatory Liability Charge (RLC) refund for FY 2013-14 as Rs. 402 Crore, and Rs. 488 Crore for FY 2014-15. For FY 2015-16, MSEDCL has considered no RLC refund.
- 3.24.2 MSEDCL submitted that the Commission, in its Order dated 2 April, 2008 in Case No. 26 of 2007 and Case No. 65 of 2006, has stated that:

*“the RLC (Regulatory Liability Charge) amounts that are required to be returned would be effected by reduction in tariffs of the subsidised consumer categories that had contributed the RLC while at the same time MSEDCL is permitted to claim these amounts as expenses in its ARR so that all consumers equally bear the RLC.”*



- 3.24.3 MSEDCL stated that, in its Order dated 17 August, 2009, the Commission had decided to refund the RLC in absolute terms, viz., Rs./month, and not in terms of paise/kWh of consumption so as to ensure that consumers get a fixed amount every month, irrespective of their consumption, thus minimising the need for undertaking detailed truing up of this refund amount. This would also be justified for the consumers who have shifted or are planning to shift to captive consumption subsequently.
- 3.24.4 In its Order dated 10 March, 2004, the Commission had ruled that the RLC should be refunded to the consumer category as a whole, and not to individual consumers. However, in its Order dated 20 June, 2008, the Commission reconsidered its views and ruled that RLC should be refunded on a one to one basis in the interest of consumers.
- 3.24.5 In view of the above, MSEDCL submitted that, during FY 2013-14, it has refunded Rs. 402 Crore of RLC. MSEDCL also stated that it had collected Rs. 3,227 Crore as RLC, and has refunded Rs. 2,893 Crore so far. Further, it has refunded around Rs. 11 Crore to PD Consumers, out of Rs. 166 Crore approved by the Commission in its Order dated 16 August, 2012. Considering this, the balance RLC to be refunded works out to Rs. 488 Crore, which is considered in FY 2014-15.
- 3.24.6 The break-up of year wise RLC refund and balance remaining as submitted by MSEDCL is shown in the following Table:

**Table 83: Details of RLC Refund**

S. No	Particulars	Amount (Rs Crore)
<b>A</b>	<b>Total RLC amount collected</b>	<b>3,227</b>
i.	RLC Refund in FY 2008-09	455
ii.	RLC Refund in FY 2009-10	639
iii.	RLC Refund in FY 2010-11	516
iv.	RLC Refund in FY 2011-12	419
v.	RLC Refund in FY 2012-13	462
vi.	RLC Refund in FY 2013-14	402
<b>B</b>	<b>Balance RLC Refund to Live Consumers(A-sum(I to vi))</b>	<b>334</b>
C	RLC Refund Approved for PD Consumers	166
D	RLC Refund to PD Consumers	11
<b>E</b>	<b>Balance RLC Refund to PD consumers(C-D)</b>	<b>155</b>
<b>F</b>	<b>Total Balance RLC Refund (B+ E)</b>	<b>488</b>

***Commission's Analysis***

- 3.24.7 Since MSEDCL has refunded RLC of Rs 402 Crore in FY 2013-14, the Commission allows that amount. However, in an additional submission subsequent

to the Public Hearings, MSEDCL has indicated that it has refunded only Rs. 38 Crore towards RLC in FY 2014-15. Hence, the Commission has considered the remaining amount of Rs. 450 Crore (488 - 38) for refund in FY 2015-16. Accordingly, the expense towards RLC refund allowed from FY 2013-14 to FY 2015-16 is as shown in the Table below:

**Table 84: RLC refund for FY 2013-14 to FY 2015-16 (Rs Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MSEDCL	Approved	MSEDCL	Approved	MSEDCL	Approved
<b>RLC refund</b>	<b>402</b>	<b>402</b>	<b>488</b>	<b>38</b>	<b>-</b>	<b>450</b>

### 3.25 Non-Tariff Income

3.25.1 MSEDCL submitted that it has certain sources of Non-Tariff Income, viz. interest on arrears of consumers, DPC, interest on staff loans and advances, sale of scrap, interest on investment, rebate on power purchase, etc. MSEDCL has considered Non-Tariff Income for FY 2013-14 based on actual income. For the purpose of projection of such income, it has assumed an increase of 5% over the previous year.

#### *Commission's Analysis*

3.25.2 Regulation 79.1 of the MYT Regulations provides that:

*"79.1 The amount of non-tariff income relating to the Distribution Business as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges of Distribution Wires Business of the Distribution Licensee."*

3.25.3 The Commission verified, from Note-22 of the Audited Accounts, the Non-Tariff Income for FY 2013-14 and, therefore, approves Rs. 1,640 Crore as Non-Tariff Income for FY 2013-14.

3.25.4 For FY 2014-15 and FY 2015-16, the Commission has considered a rise of 5% per annum in income on this account, as submitted by MSEDCL. The Commission observed that, as against an income of Rs. 65 Crore towards recovery from theft / malpractices reported during FY 2013-14, MSEDCL has not projected any income under this head in FY 2014-15 and FY 2015-16. Subsequently, in response to a query, MSEDCL projected recovery from theft at Rs. 39 Crore and Rs. 40 Crore for FY 2014-15 and FY 2015-16 respectively. The Commission has considered the same.

3.25.5 The Non-Tariff Income approved for FY 2013-14 to FY 2015-16 is as shown below

**Table 85: Non-Tariff Income for FY 2013-14 to FY 2015-16 (Rs Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MSEDCL	Approved	MSEDCL	Approved	MSEDCL	Approved
Non-Tariff Income	1,640	1,640	1,722	1,761	1,807	1,847

**3.26 Income from Wheeling Charges**

3.26.1 MSEDCL submitted the income from Wheeling Charges in FY 2013-14 based on the Audited Accounts. This was verified from Note-22 of the Audited Accounts and found to be correct.

***Commission's Analysis***

3.26.2 For FY 2014-15 and FY 2015-16, a nominal annual increase of 5% has been considered by MSEDCL to project the income from Wheeling Charges. The Commission approves the same for the determination of ARR for these two years.

**Table 86 : Income from Wheeling Charges for FY 2013-14 to FY 2015-16 (Rs Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MSEDCL	Approved	MSEDCL	Approved	MSEDCL	Approved
Income from Wheeling Charges	19	19	20	20	21	21

**3.27 Income from Open Access Charges**

3.27.1 MSEDCL submitted the income from OA charges for FY 2013-14 based on the Audited Accounts. This was verified from Note-22 of the Audited Accounts and found to be correct.

***Commission's Analysis***

3.27.2 For FY 2014-15 and FY 2015-16, MSEDCL had stated in its Petition that a nominal annual increase of 5% has been considered for projection of income from OA charges. However, in an additional submission subsequent to the Public Hearings, MSEDCL has revised the estimate of Income from OA charges. Considering that the revised estimation has been made considering latest data, the Commission accepts the revised projections.

**Table 87 : Income from Open Access charges for FY 2013-14 to FY 2015-16 (Rs Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MSEDCL	Approved	MSEDCL	Approved	MSEDCL	Approved
Income from Open Access charges	404	404	424	296	445	311

**3.28 Revenue from Trading of Surplus Power**

3.28.1 MSEDCL submitted that, based on the Power Procurement Plan for FY 2014-15 and FY 2015-16 and projected sales, and considering an average of 5% to 6% Inter-State Transmission Loss and remaining power being available for trading, it has calculated the Energy Balance. Based on this Energy Balance, MSEDCL has considered the surplus energy available for trading. It has assumed the rate for sale of surplus power as equal to the average power purchase cost for the respective years. The following Table shows the income from trading of surplus power as submitted by MSEDCL in its Petition.

**Table 88: Income from trading of surplus power as submitted by MSEDCL for FY 2013-14 to FY 2015-16 (Rs Crore)**

Particulars	FY 2013-14 (Actual)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Surplus Energy available for Trading (MU)	484	6,500	13,200
Rates for Trading of Surplus Power (Rs./kWh)	2.03	3.60	3.48
Income from Trading of Surplus Power (Rs. Crore)	98	2,339	4,590

3.28.2 However, in an additional submission subsequent to the Public Hearing, MSEDCL has revised the estimate of income from traded surplus. MSEDCL has stated that, based on the projections of power purchase for FY 2014-15 and FY 2015-16, which were very optimistic, and based on assumption of limited growth in demand, MSEDCL has projected a considerable quantum of surplus energy as available for trade, and its revenue was adjusted in ARR. According to MSEDCL, it had not considered MoD principles or any backing down of generation of power, and had assumed that all the power that has been tied up would be available for sale or trading. However, considering the comments made during the Hearings, a more realistic scenario of power procurement and demand has been considered for projection of surplus energy. Therefore, for FY 2014-15, no surplus power is now considered for trading in FY 2015-16.

***Commission's Analysis***

3.28.3 As regards FY 2013-14, the Commission has verified the income from traded surplus approved under the Energy Balance above. For FY 2014-15, it had sought details of actual surplus power traded during FY 2014-15. MSEDCL submitted the following details, upto November, 2014.

**Table 89: Income from trading of surplus power as submitted by MSEDCL for FY 2013-14 to FY 2015-16**

Month	IEX		PXIL		To BEST	
	MU	Rate	MU	Rate	MU	Rate
		(Rs./Unit)		(Rs./Unit)		(Rs./Unit)
<b>Apr-14</b>	2.40	2.37	-	-	-	-

Month	IEX		PXIL		To BEST	
	MU	Rate	MU	Rate	MU	Rate
		(Rs./Unit)		(Rs./Unit)		(Rs./Unit)
May-14	10.25	2.44	-	-	-	-
Jun-14	32.43	2.41	0.11	3.18	-	-
Jul-14	59.98	2.64	2.11	3.67	52.25	2.99
Aug-14	59.82	3.23	6.60	3.64	42.18	2.99
Sep-14	31.45	3.04	0.75	2.71	1.73	3
Oct-14	1.20	2.37	0	0	0	0
Nov-14	59.30	2.10	0	0	0	0
<b>Total</b>	<b>256.83</b>	<b>2.66</b>	<b>9.57</b>	<b>3.57</b>	<b>96.15</b>	<b>2.99</b>

3.28.4 Thereafter, MSEDCL updated status of traded surplus as on January, 2015 as 542.55 MU. In the absence of actual traded power data for the full year, the Commission has estimated it, on pro rata basis, at 651 MU for FY 2014-15. Thus, estimated power traded during FY 2014-15 is far lower than the 6500 MU projected by MSEDCL. Further, for projection of revenue, the Commission has considered the weighted average rate of actual power traded, as reported by MSEDCL in the above Table.

3.28.5 For FY 2015-16, the Commission accepts the revised submission of MSEDCL, and has not approved any revenue from traded surplus for the year. Accordingly, the Commission approves the following revenue from traded surplus.

**Table 90 : Income from surplus power traded during FY 2013-14 to FY 2015-16 approved by Commission (Rs. Crore)**

Particulars	FY 2013-14 (Actual)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Surplus Energy available for Trading (MU)	484	651	-
Rates for Trading of Surplus Power (Rs./kWh)	2.03	2.77	-
Income from Trading of Surplus Power (Rs. Crore)	98	180	-

### 3.29 Revenue on account of change of Category

3.29.1 During the present proceedings, one of the objectors contended that, despite the Commission's directive that the option of shifting from the HT-I Continuous to HT-I Non-Continuous category may be exercised only within 30 days of the Tariff Order, MSEDCL continued to allow a number of consumers applying after this time limit to shift from one to the other, i.e. from a higher tariff to a lower one. This has resulted in significant revenue shortfall to MSEDCL. It was alleged that, while doing so, the process followed was arbitrary, inasmuch as some consumers

were given the benefit retrospectively, while some others were given relief belatedly on a prospective basis.

- 3.29.2 In its subsequent submission, MSEDCL has stated that the issue is sub-judice with the Commission, and that a PIL is also pending in the High Court.

***Commission's Analysis***

- 3.29.3 In its Order in Case No. 44 of 2008, the Commission had allowed the HT-I Continuous consumers to exercise their choice between Continuous and non-Continuous supply within the first month from the issue of the Tariff Order for relevant Tariff Period as follows:

*"1. Applicability of HT-I (Continuous Industry)*

...

*Commission's Ruling and Clarification: The Commission is of the view that MSEDCL should not ignore the benefits of load relief that could be achieved, in case certain HT-I continuous industries, who are presently not subjected to load shedding, voluntarily agree to one day staggering like other industries located in MIDC areas. Hence, the HT industrial consumer connected on express feeder should be given the option to select between continuous and non –continuous type of supply, and there is no justification for removing the clause "demanding continuous supply" from the definition of HT-I continuous category. **However, it is clarified that the consumer getting supply on express feeder may exercise his choice between continuous and non-continuous supply only once in the year, within the first month after issue of the Tariff Order for the relevant tariff period. In the present instance, the consumer may be given one month time from the date of issue of this Order for exercising his choice. In case such choice is not exercised within the specified period, then the existing categorisation will be continued.**"*

- 3.29.4 While MSEDCL's allowing switch over for an extended period has benefited some consumers, the Commission is of the view that consumers at large cannot be made to bear any additional burden on account of MSEDCL's discretionary and unsanctioned act. The Commission asked MSEDCL to submit the details of consumers, date of shifting and annual consumption in respect of shifts from HT-I Continuous to HT-I Non-Continuous after the stipulated period. From the data submitted, the Commission observes that 28 consumers were granted permission for change in category within the stipulated period. However, MSEDCL received applications from 280 consumers thereafter, out of which it granted permission to 132 consumers, and the remaining 148 are pending.

- 3.29.5 Based on the above, the Commission has worked out the approximate loss of revenue on account of allowing such shifting even after the time limit stipulated by it, at Rs. 85.07 Crore and Rs. 102.06 Crore in FY 2013-14 and FY 2014-15, respectively. The Commission has decided to consider these amount as the deemed

revenue of MSEDCL for the respective years. However, MSEDCL is directed to submit the actual loss of revenue on this account for the respective years in its with next ARR Petition.

### **3.30 Revenue from Sale of Power**

- 3.30.1 MSEDCL has submitted that the total revenue in FY 2013-14 was Rs. 51,482 Crore, which comprised revenue from sale of power of Rs. 50,961 Crore, income from trading of Rs. 98 Crore, income from Wheeling Charges of Rs. 19 Crore and Income from OA Charges of Rs. 404 Crore.

#### ***Commission's Analysis***

- 3.30.2 The Commission verified the revenue from the Annual Accounts for FY 2013-14 and noted that revenue from sale of power, Wheeling Charges, income from stand-by charges and income from miscellaneous charges from consumers amounts to Rs. 51,482 Crore, as claimed by MSEDCL.
- 3.30.3 For FY 2014-15, MSEDCL has estimated revenue from sale of power at Rs. 54,020 Crore based on projections of sales, number of consumers, Connected Load/Contract Demand and applicable AEC (as per the Commission's Interim Order in Case No. 38 of 2014 and MYT Orders of MSPGCL and MSETCL) of all the consumer categories. However, based on revised estimates, the Commission has considered the revenue at Rs. 55,259 Crore taking the figures of actuals till February, 2015 submitted by MSEDCL.
- 3.30.4 Regarding FY 2015-16, MSEDCL has worked out revenue from sale of power at the existing tariff at Rs. 59,419 Crore by applying the tariff rates at the time of submission of the Petition, i.e. in February 2015, on the projections of sales, number of consumers, and Connected Load/Contract Demand. These rates include the base tariff rates as per Order in Case No.19 of 2012, IC, GC-I, GC-II and TC components (as per the Orders in Case Nos. 38 and 54 of 2014, and Case No. 95 of 2013).
- 3.30.5 However, the Commission has worked out revenue from sale of power at the existing tariff at Rs. 58,978 Crore. The difference is due to the difference in sales projections, number of consumers and Connected Load/Contract Demand, as projected by the Commission, which are different from the corresponding figures projected by MSEDCL. The comparison of sales projection by MSEDCL vis-a-vis that approved by the Commission has been set out in Table-17.
- 3.30.6 The figures of revenue from sale of power at existing tariffs as submitted by MSEDCL and as approved by the Commission for FY 2013-14, FY 2014-15 and FY 2015-16 are as given below:

**Table 91: Revenue from sale of power for FY 2013-14, FY 2014-15 and FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MSEDCL	Approved	MSEDCL	Approved	MSEDCL	Approved
Revenue from sale of power	50,961	50,961	54,020	55,259	59,419	58,978

**3.31 Effect of sharing of Gains and Losses for FY 2013-14**

- 3.31.1 The Audited Accounts for FY 2013-14 have been submitted by MSEDCL with the present Petition. Thus, Commission has scrutinized and approved the expense and revenue heads for FY 2013-14, considering the actual amounts as per the Audited Accounts after carrying out prudence check. However, as regards parameters such as O&M Expenses and IoWC, for which specific norms have been specified in the MYT Regulations, these have been calculated on normative basis.

***Commission's Analysis***

- 3.31.2 As these parameters are to be treated as controllable under the MYT Regulations, any variation in the actual expenses as against the permissible normative levels has been shared between MSEDCL and consumers. By allowing the impact of sharing of gains and losses in this Order, the Commission also intends to avoid any undue carrying cost burden on consumers which would arise due to deferred recovery of such impact. Many responders and Consumer Representatives also favoured such treatment as the audited Annual Accounts are available. Hence, the Commission has undertaken the sharing of gains/losses for FY 2013-14 even though it has not been sought by MSEDCL.
- 3.31.3 Regulation 12, 13 and 14 of the MYT Regulations specify the controllable and uncontrollable parameters, mechanism of pass through of gains and losses on account of uncontrollable parameters, and the mechanism for sharing of gains and losses on account of controllable parameters. The relevant provisions are as under:

*“14.1 The approved aggregate gain to the Generating Company or Transmission Licensee or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:*

*(a) One-third of the amount of such gain shall be passed on as a rebate in tariff over such period as may be stipulated in the Order of the Commission under Regulation 11.6;*

*(b) The balance amount, which will amount to two-third of such gain, may be utilised at the discretion of the Generating Company or Transmission Licensee or Distribution Licensee.*

*14.2 The approved aggregate loss to the Generating Company or Transmission Licensee or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:*



(a) One-third of the amount of such loss may be passed on as an additional charge in tariff over such period as may be stipulated in the Order of the Commission under Regulation 11.6; and

(b) The balance amount of loss shall be absorbed by the Generating Company or Transmission Licensee or Distribution Licensee.

14.3 Gains and losses on account of controllable factors during the second Control Period shall be shared with the consumers at the time of Mid-term Performance Review and also at the time of tariff determination process of third Control Period.“

3.31.4 **O&M Expenditure:** The actual O&M Expenses claimed by MSEDCL as per the Audited Accounts for FY 2013-14 are lower than allowed on normative basis. One third of the efficiency gain has been passed on to the consumers and two thirds allowed to be retained by MSEDCL. The summary of sharing of efficiency gains on account of O&M Expenses is shown in the Table below.

**Table 92: Sharing of Gains & Losses for O&M Expenses (Supply) For FY 2013-14 (Rs Crore)**

Particulars	MSEDCL (Actual)	Allowed in ARR	Gains/(Loss)	Impact of Efficiency Gains /losses passed on to consumers	Net Entitlement after sharing of Gains & Losses
O&M Expenses	1,179	1,686	506	(169)	1,517

**Table 93 : Sharing of Gains & Losses for O&M Expenses (Wires) for FY 2013-14 (Rs Crore)**

Particulars	MSEDCL (Actual)	Allowed in ARR	Gains/(Loss)	Impact of Efficiency Gains /losses passed on to consumers	Net Entitlement after sharing of Gains & Losses
O&M Expenses	4,140	3,718	(423)	141	3,859

**Table 94 : Sharing of Gains & Losses for O&M Expenses (Supply+Wires) for FY 2013-14 (Rs Crore)**

Particulars	MSEDCL (Actual)	Allowed in ARR	Gains/(Loss)	Impact of Efficiency Gains /losses passed on to consumers	Net Entitlement after sharing of Gains & Losses
O&M Expenses	5,320	5,404	84	(28)	5,376

3.31.5 **Interest on Working Capital:** The actual IoWC expense claimed by MSEDCL as per the Audited Accounts for FY 2013-14 is higher than that allowed on normative basis. One third of the efficiency loss has been passed on to consumers, and two

thirds to MSEDCL. The summary of sharing of efficiency loss on account of IoWC expenses is shown in the Table below.

**Table 95 : Sharing of Gains & Losses for FY 2013-14 (Supply)**

Particulars	MSEDCL (Actual)	Allowed in ARR	Gains/(Loss)	Impact of Efficiency Gains /losses passed on to consumers	Net Entitlement after sharing of Gains & Losses
IoWC – Supply	75	-	(75)	25	25
IoWC– Wires	214	170	(44)	15	185
<b>Interest on Working Cap.– Total</b>	<b>289</b>	<b>170</b>	<b>(119)</b>	<b>40</b>	<b>210</b>

3.31.6 The total impact of sharing of gains and losses of various components have been summarised in the Table below:

**Table 96 : Total Impact of Sharing of Gains & Losses of O&M Expense and IoWC for FY 2013-14 (Rs Crore)**

Components	MSEDCL (Actual)	Allowed in ARR	Gains/ (Loss)	Impact of Efficiency Gains /losses passed on to consumers	Net Entitlement after sharing of Gains & Losses
<b>O&amp;M Expenses</b>	<b>5,320</b>	<b>5,404</b>	<b>84</b>	<b>(28)</b>	<b>5,376</b>
IoWC – Supply	75	-	(75)	25	25
IoWC – Wires	214	170	(44)	15	185
<b>Interest on Working Cap. – Total</b>	<b>289</b>	<b>170</b>	<b>(119)</b>	<b>40</b>	<b>210</b>
<b>Grand Total</b>	<b>5,609</b>	<b>5,573</b>		<b>12</b>	<b>5,585</b>

### 3.32 Wires and Supply Availability Incentive for FY 2013-14

3.32.1 MSEDCL has submitted the following Wire Availability for FY 2013-14:

**Table 97 : Wires Availability of MSEDCL in FY 2013-14**

Particulars	FY 2013-14	
	Rural Areas	Towns & Cities
SAIDI	82.36	82.36
Wires Availability	99.06%	99.06%

3.32.2 MSEDCL has submitted the following Supply Availability for FY 2013-14.

**Table 98 : Supply Availability of MSEDCL in FY 2013-14**

Particulars	FY 2013-14
Base Load Supply Availability	
Contracted Base Load Supply in MW	8454

Particulars	FY 2013-14
Base Load in MW	8454
<b>Base Load Supply Availability (%)</b>	<b>100%</b>
Peak Load Supply Availability	
Contracted Peak Load Supply in MW	13830
Peak Load in MW	14406
<b>Peak Load Supply Availability (%)</b>	<b>96%</b>
<b>Supply Availability</b>	<b>99%</b>

3.32.3 Although it has submitted details of Supply and Wires Availability, MSEDCL has not claimed any Availability incentive. Accordingly, the Commission has not approved any incentive on this account.

### 3.33 Segregation of Wires and Supply ARR

3.33.1 In its Business Plan Order dated 26 August, 2013 (Case No. 134 of 2012), the Commission has approved the percentage segregation of the ARR into Wires Business and Supply Business. MSEDCL has considered the same in the present Petition. The Allocation matrix is reproduced below. Based on this, MSEDCL has presented the Wires and Supply ARRs for FY 2013-14 to FY 2015-16. As elaborated in earlier paragraphs, the Commission has undertaken component-wise analysis of the respective ARRs in accordance with the Regulations, and has approved them as set out in the subsequent paragraphs.

**Table 99 : Ratio of allocation of expenses to Wires and Supply Businesses**

Sr. No.	Particulars	Wires Business	Supply Business
1.	Power purchase expenses – Fixed Charges	5%	95%
2.	Power purchase expenses – Fixed Charges	05	100%
3.	Employee expenses	75%	25%
4.	Administration and General expenses	75%	25%
5.	Repair and Maintenance expenses	95%	5%
6.	Depreciation	90%	10%
7.	Interest on long-term loan capital	90%	10%
8.	Interest on working capital	100%	0%
9.	Other Finance Charges	90%	10%
10.	Provision for Bad Debts	10%	90%
11.	Other expenses	0%	100%
12.	Income tax	90%	10%
13.	Transmission Charges paid to Transmission Licensee	0%	100%
14.	Contribution to Contingency Reserves	90%	10%
15.	Incentives and discounts	0%	100%
16.	Return on equity capital	90%	10%
17.	Non-Tariff Income	0%	100%
18.	Income from wheeling charges	100%	0%

- 3.33.2 It will be seen from the above allocation Table that, in the allocation ratio approved in the Business Plan Order, 5% of the Fixed Charges of power purchase have been allocated to Wires. However, in Regulation 73 of the MYT Regulations, which specifies the components of ARR of the Distribution Wires Business, there is no component of power purchase. Hence, while approving the Wires ARR and Supply ARR in this Order, the Commission has allocated the entire power purchase expense to the Supply ARR.

### 3.34 Determination of ARR for FY 2013-14

- 3.34.1 Based on the above analysis, the summary of ARR for the Wires Business and Supply Business, as claimed by MSEDCL and as approved by the Commission, for FY 2013-14 is presented in the Tables below.

**Table 100 : Aggregate Revenue Requirement for FY 2013-14 (Wires) (Rs. Crore)**

S. No.	Particulars	MSEDCL (Actual)	Approved in this Order
1	Power Purchase Expenses (including Inter-State Transmission Charges)	443	-
2	Operation & Maintenance Expenses	4,140	3,718
3	Depreciation Expenses	1,673	1,450
4	Interest on Long-term Loan Capital	1,294	1,322
5	Interest on Working Capital and on consumer Security Deposits	263	219
6	Other Finance Charges	371	33
7	Provisioning for Bad & Doubtful Debts	35	21
8	Income Tax	10	93
9	Contribution to Contingency Reserves	-	-
<b>10</b>	<b>Total Revenue Expenditure</b>	<b>8,231</b>	<b>6,855</b>
11	Return on Equity Capital	1,349	1,133
<b>12</b>	<b>Aggregate Revenue Requirement</b>	<b>9,580</b>	<b>7,989</b>
13	Less: Income from Wheeling Charges	19	19
14	Less: Income from Open Access Charges	404	404
15	Effect of sharing of gains/losses	-	156
<b>16</b>	<b>Aggregate Revenue Requirement for Wires Business</b>	<b>9,157</b>	<b>7,722</b>

**Table 101 : Aggregate Revenue Requirement for FY 2013-14 (Supply) (Rs. Crore)**

S. No.	Particulars	MSEDCL (Actual)	Approved in this Order
1	Power Purchase Expenses (including Inter-State Transmission Charges)	33,480	33,922
2	Operation & Maintenance Expenses	1,179	1,686

S. No.	Particulars	MSEDCL (Actual)	Approved in this Order
3	Depreciation Expenses	186	161
4	Interest on Long-term Loan Capital	144	147
5	Interest on Working Capital and on consumer Security Deposits	453	378
6	Other Finance Charges	41	4
7	Provisioning for Bad & Doubtful Debts & actual Bad Debt written off	317	189
8	Other Expenses	89	89
8(a)	Expense on account of Interest Write-off under Abhay Yojana	167	-
9	Income Tax	93	10
10	Transmission Charges - Intra-State including MSLDC charge	5,604	5,604
11	Contribution to Contingency Reserves	-	-
12	Incentives/Discounts	219	219
13	Prior Period Expenses	739	272
14	DSM expenses	-	-
<b>15</b>	<b>Total Revenue Expenditure</b>	<b>42,712</b>	<b>42,682</b>
16	Return on Equity Capital	168	142
<b>17</b>	<b>Aggregate Revenue Requirement</b>	<b>42,879</b>	<b>42,824</b>
18	Less: Non-Tariff Income	1,640	1,640
19	Less: Deemed Revenue on account of change of category	-	85
20	Add: RLC refund	402	402
21	Add: Effect of sharing of gains/losses	-	(144)
<b>22</b>	<b>Aggregate Revenue Requirement for Supply Business</b>	<b>41,641</b>	<b>41,357</b>

**Table 102 : Aggregate Revenue Requirement for FY 2013-14 (Combined Wires+Supply) (Rs. Crore)**

S. No.	Particulars	MSEDCL (Actual)	Approved in this Order
1	Power Purchase Expense	33,922	33,922
2	Operation & Maintenance Expenses	5,320	5,404
3	Depreciation Expenses	1,859	1,611
4	Interest on Long-term Loan Capital	1,438	1,469
5	Interest on Working Capital	717	597
6	Other Finance Charges	412	36
7	Provisioning for Bad & Doubtful Debts	353	210
8	Other Expenses	89	89
8(a)	Expense on Interest Write-off under Abhay Yojana	167	-
10	Income Tax	103	103
11	Transmission Charges - Intra-State including MSLDC	5,604	5,604

S. No.	Particulars	MSEDCL (Actual)	Approved in this Order
	charge		
12	Contribution to Contingency Reserves	-	-
13	Incentives/Discounts	219	219
14	Prior Period Expenses	739	272
15	DSM expenses	-	-
<b>16</b>	<b>Total Revenue Expenditure</b>	<b>50,942</b>	<b>49,536</b>
17	Return on Equity Capital	1,517	1,276
<b>18</b>	<b>Aggregate Revenue Requirement</b>	<b>52,459</b>	<b>50,812</b>
19	Less: Non-Tariff Income	1,640	1,640
20	Less: Income from Wheeling Charges	19	19
21	Less: Income from Open Access Charges	404	404
22	Less: Deemed Revenue for undue category change	-	85
23	Add: RLC refund	402	402
24	Effect of sharing of gains/losses	-	12
<b>25</b>	<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>50,798</b>	<b>49,078</b>
26	Less: Revenue from Sale of Power	<b>50,961</b>	<b>50,961</b>
27	Less: Revenue from Trading Surplus	<b>98</b>	<b>98</b>
<b>28</b>	<b>Revenue Gap/(Surplus)</b>	<b>(261)</b>	<b>(1,981)</b>

### 3.35 Determination of ARR for FY 2014-15 to FY 2015-16

3.35.1 Based on the above analysis, the summary of ARR for Wires Business and Supply Business as claimed by MSEDCL and as approved by the Commission for FY 2014-15 and FY 2015-16 is presented in the Tables below.

**Table 103 : Aggregate Revenue Requirement for FY 2014-15 and FY 2015-16 (Wires)**  
(Rs. Crore)

S. No.	Particulars	FY 2014-15		FY 2015-16	
		MSEDCL's Submission	Approved in this Order	MSEDCL's Submission	Approved in this Order
1	Power Purchase Expenses (including Inter-State Transmission Charges)	546	-	670	-
2	Operation & Maintenance Expenses	4,381	4,114	4,988	4,627
3	Depreciation Expenses	1,879	1,746	2,060	1,920
4	Interest on Long-term Loan Capital	1,301	1,432	1,351	1,512
5	Interest on Working Capital and on consumer security deposits	309	244	306	268
6	Other Finance Charges	1,414	34	35	35
7	Provisioning for Bad & Doubtful	35	21	35	21

S. No.	Particulars	FY 2014-15		FY 2015-16	
		MSEDCL's Submission	Approved in this Order	MSEDCL's Submission	Approved in this Order
	Debts				
8	Income Tax	10	0.04	10	0.04
9	Contribution to Contingency Reserves	85	-	94	91
<b>10</b>	<b>Total Revenue Expenditure</b>	<b>9,961</b>	<b>7,590</b>	<b>9,550</b>	<b>8,475</b>
11	Return on Equity Capital	1,481	1,255	1,587	1,359
<b>12</b>	<b>Aggregate Revenue Requirement</b>	<b>11,442</b>	<b>8,845</b>	<b>11,137</b>	<b>9,835</b>
13	Less: Income from Wheeling Charges	20	20	21	21
14	Less: Income from Open Access Charges	424	296	445	311
<b>15</b>	<b>Aggregate Revenue Requirement for Wires Business</b>	<b>10,998</b>	<b>8,528</b>	<b>10,671</b>	<b>9,502</b>

**Table 104 : Aggregate Revenue Requirement for FY 2014-15 and FY 2015-16 (Supply)**  
(Rs. Crore)

S. No.	Particulars	FY 2014-15		FY 2015-16	
		MSEDCL's Submission	Approved in this Order	MSEDCL's Submission	Approved in this Order
1	Power Purchase Expenses (including Inter-State Transmission Charges)	40,635	39,694	44,415	41,249
2	Operation & Maintenance Expenses	1,909	1,842	2,135	2,085
3	Depreciation Expenses	209	194	229	213
4	Interest on Long-term Loan Capital	145	159	150	168
5	Interest on Working Capital and on consumer security deposits	564	486	617	520
6	Other Finance Charges	157	4	4	4
7	Provisioning for Bad & Doubtful Debts & actual Bad Debt written off	317	189	317	189
8	Other Expenses	93	20	98	21
9	Expense on account of Interest Write-off under Abhay Yojana	-	-	-	-
10	Income Tax	93	0.004	93	0.004
11	Transmission Charges - Intra-State including MSLDC charge	5,490	5,490	6,320	3,627
12	Contribution to Contingency Reserves	9	-	10	10

S. No.	Particulars	FY 2014-15		FY 2015-16	
		MSEDCL's Submission	Approved in this Order	MSEDCL's Submission	Approved in this Order
13	Incentives/Discounts	230	230	242	242
14	Prior Period Expenses	-	-	-	-
15	DSM expenses	-	1	-	8
<b>16</b>	<b>Total Revenue Expenditure</b>	<b>49,852</b>	<b>48,310</b>	<b>54,631</b>	<b>48,337</b>
17	Return on Equity Capital	184	157	197	171
<b>18</b>	<b>Aggregate Revenue Requirement</b>	<b>50,036</b>	<b>48,467</b>	<b>54,828</b>	<b>48,507</b>
19	Less: Non-Tariff Income	1,722	1,761	1,807	1,847
20	Less: Deemed Revenue on account of change of category	-	102	-	-
21	Add: RLC refund	488	38	-	450
22	Add: Effect of sharing of gains/losses	-	-	-	-
<b>23</b>	<b>Aggregate Revenue Requirement for Supply Business</b>	<b>48,803</b>	<b>46,642</b>	<b>53,021</b>	<b>47,111</b>

**Table 105 : Aggregate Revenue Requirement for FY 2014-15 and FY 2015-16  
(Wires+Supply) (Rs. Crore)**

S. No.	Particulars	FY 2014-15		FY 2015-16	
		MSEDC L's Submission	Approved in this Order	MSEDC L's Submission	Approved in this Order
1	Power Purchase Expense	41,181	39,694	45,085	41,249
2	Operation & Maintenance Expenses	6,289	5,957	7,123	6,712
3	Depreciation Expenses	2,088	1,940	2,289	2,134
4	Interest on Long-term Loan Capital	1,446	1,591	1,501	1,680
5	Interest on Working Capital	874	728	923	788
6	Other Finance Charges	1,571	38	39	39
7	Provisioning for Bad & Doubtful Debts	353	210	353	210
8	Other Expenses	93	20	98	21
9	Income Tax	103	0.04	103	0.04
10	Transmission Charges - Intra-State including MSLDC charge	5,490	5,490	6,320	3,627
11	Contribution to Contingency Reserves	95	-	105	101
12	Incentives/Discounts	230	230	242	242
13	Prior Period Expenses	-	-	-	-
14	DSM expenses	-	1	-	8
<b>15</b>	<b>Total Revenue Expenditure</b>	<b>59,812</b>	<b>55,899</b>	<b>64,181</b>	<b>56,812</b>



S. No.	Particulars	FY 2014-15		FY 2015-16	
		MSEDCL's Submission	Approved in this Order	MSEDCL's Submission	Approved in this Order
16	Return on Equity Capital	1,665	1,412	1,784	1,530
<b>17</b>	<b>Aggregate Revenue Requirement</b>	<b>61,477</b>	<b>57,312</b>	<b>65,965</b>	<b>58,342</b>
18	Less: Non-Tariff Income	1,722	1,761	1,807	1,847
19	Less: Income from Wheeling Charges	20	20	21	21
20	Less: Income from Open Access Charges	424	296	445	311
21	Less: Deemed Revenue for undue category change	-	102	-	-
22	Add: RLC refund	488	38	-	450
23	Effect of sharing of gains/losses	-	-	-	-
<b>24</b>	<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>59,800</b>	<b>55,171</b>	<b>63,692</b>	<b>56,613</b>
25	Less: Revenue from Sale of Power	54,020	55,259	59,419	58,978
26	Less: Revenue from Trading Surplus	2,339	180	4,590	-
<b>27</b>	<b>Revenue Gap/(Surplus)</b>	<b>3,442</b>	<b>(269)</b>	<b>(316)</b>	<b>(2,365)</b>

## **4 IMPACT OF PAST ORDERS ON REVENUE GAP**

In addition to the ARR determined for FY 2013-14 to FY 2015-16, there are various other claims of MSEDCL relating to previous Orders. This Section analyses the claims with reference to earlier Orders and relevant ATE Judgments which need to be considered for determination of the consolidated Revenue Gap.

### **4.1 Balance Revenue Gap of Final True up of FY 2011-12 and FY 2012-13**

4.1.1 MSEDCL submitted that it had filed a Petition in Case No. 38 of 2014 for Truing up for FY 2011-12 and FY 2012-13, carrying cost for delayed approvals, revision in CSS and for Additional Energy Charges (AEC) for their recovery.

4.1.2 Vide its Interim Order dated 3 March 2014, the Commission had granted interim relief to maintain the financial viability of MSEDCL. In its final Order dated 11 June, 2014, the Commission stated the following:

*“5.2.4 However, the Commission has already approved recovery of Rs. 5022.10 crore through the Interim Relief Order of 3 March, 2014. At this stage the Commission is also aware that MSEDCL needs to comply with the Commission’s direction of filing its MYT petition. Granting MSEDCL to recover the balance approved Revenue Gap of Rs. 1638.80 crore through another stream of additional energy charges will result into revising the Tariff of MSEDCL within three months of changing the Tariff. Also, when the determination of MYT for MSEDCL is imminent, it is appropriate that the balance approved Revenue Gap be considered together with the ARR in MSEDCL’s MYT Petition...”*

4.1.3 In view of the above, MSEDCL has claimed Rs.1,638.80 Crore towards the balance Revenue Gap of final true up of FY 2011-12 and FY 2012-13 in the present Petition. Moreover, since the The Order was issued in June, 2014 and recovery has been delayed, MSEDCL has requested the Commission for carrying cost on it.

#### ***Commission’s Ruling***

4.1.4 The Commission, in its Order dated 11 June, 2014 in Case No. 38 of 2014, has approved Rs. 1638.80 Crore as the balance Revenue Gap to be recovered through the MYT Order. Accordingly, the Commission allows the recovery of Rs. 1638.80 Crore, as claimed by MSEDCL, in the consolidated Revenue Gap along with carrying cost.

### **4.2 Refund of difference of Tariff (Case No. 105 of 2013)**

4.2.1 MSEDCL submitted that it had filed a Review Petition (Case No. 105 of 2013) against the Order dated 16 July, 2013 in Case No. 88 of 2012 in which the Commission had given clarification regarding the levy of additional electricity charges for HT-1 Express Feeder (Continuous supply) category consumers in billing cycles during which there had been load shedding.

- 4.2.2 In its Order dated 17 July 2014, the Commission had directed MSEDCL to verify that the Respondents (in Case No. 105 of 2013) were certified by the Directorate of Industries, GoM as a continuous process industry during the relevant billing months, and refund the differential amount to them. The refund should be made in 12 monthly instalments, and the amount refunded adjusted in the ARR in the subsequent Tariff Petition.
- 4.2.3 Accordingly, MSEDCL submitted that it has calculated the provisional refund amount of Rs. 117 Crore, and had reported it to the Commission vide letter No.PR-3/Tariff/25964 dated 6 August, 2014. However, the final refund amount has been revised to Rs. 83 Crore, which is being claimed in this Petition.

***Commission's Ruling***

- 4.2.4 In its Order dated 17 July, 2014 in Case No. 105 of 2013, the Commission had ruled as follows:

*“12.1. Heard the Petitioner and Respondent, the Commission notes three points raised by MSEDCL:*

- (1) Undertaking by some of the Respondents to accept supply at sub-SoP,*
- (2) Financial burden on account of refund of difference of Tariff for the period from June 2008 to September 2011*
- (3) The consequences of the Order will not be restricted only to 17 nos. of original Petitioner consumers but all other such type of consumers may come forward for demanding similar refund which may put MSEDCL under heavy financial burden.*

*12.2. Taking into consideration the Commission's Order in Case No. 88 of 2012, the Commission is of the view that regardless of undertaking or agreement on supply on sub-SoP level, MSEDCL was bound to supply continuous power as envisaged for continuous process industry. MSEDCL is directed to verify that the Respondents (in Case No. 105 of 2013) had DIC Certificate as continuous process industry issued by the Directorate of Industries, Government of Maharashtra during those billing months under consideration of this Petition and refund these Respondents. The Respondents who did not have a valid certification as continuous process Industry issued by the Directorate of Industries, Government of Maharashtra for that period will not be entitled for any relief.*

*12.3. The Commission has noted the Petitioner's concern in current case about the financial implication of this Order. The Commission is of the view that since the Respondents (in Case No. 105 of 2013) have suffered financial losses, the amount of actual loss must be reimbursed after calculation in each case. However, this Commission notes, there has been considerable delay on the part of the Petitioner in filing the Original Petition (in Case No. 88 of 2012) for relief. While relief to the Petitioner (in Case No. 88 of 2012) have not been disallowed on grounds of delay, the entitlement to interest needs to be considered against the fact that an early filing of petition would have meant less of interest and less burden on Respondent, MSEDCL (in Case No. 88 of 2012). The Commission is inclined to take the view that refund to be given in full without interest.*

12.4. The amount applicable for refund shall be calculated and same should be reported within 30 days of this Order. The amount of refund should be adjusted in 12 monthly installments.

12.5. The amount refunded shall be adjusted in Annual Revenue Requirement in future Tariff Petition.”

- 4.2.5 In pursuance of the above ruling, MSEDCL has claimed Rs. 83 Crore towards refund of difference in tariff. The Commission has considered the same accordingly.

#### 4.3 Disallowed Capex-related expenses for FY 2007-08

- 4.3.1 MSEDCL submitted that it had filed an Appeal No. 227 of 2012 & IA No. 20 of 2014 challenging the Commission’s Tariff Order dated 16 August, 2012 in Case No. 19 of 2012. In the Appeal, MSEDCL contended that the Commission had approved the capex and capitalisation as submitted by it in its Tariff Petition for FY 2010-11, FY 2011-12 and FY 2012-13. However, due to difference in the opening balance of GFA, the actual expenditure allowed in the Tariff Order was lower than that submitted by MSEDCL. Thus, there was a disallowance of about Rs. 250 Crore in relation to depreciation, Interest on Loan and RoE.

- 4.3.2 In its Judgment dated 30 May 2014, the ATE ruled that the main reason for difference in the opening GFA was due to disallowance of certain capitalisation in earlier Orders for previous years due to non-submission of the requisite details. The Commission in the past had reconsidered the capitalisation whenever MSEDCL had furnished such details. ATE gave liberty to MSEDCL to file a Petition raising its claims with supporting reasons, computations and explanation, and directed the Commission to consider the same and decide it according to law:

*“iv) Additional capitalisation and disallowance of Capex: We have granted liberty to the Appellant to file a petition raising its claims with supporting documents and the State Commission shall consider the same and decide according to law.”*

- 4.3.3 MSEDCL has submitted the CBA of Non DPR Schemes to the Commission vide letter dated 30 July, 2014. It requested the Commission to allow the difference between the audited capex-related expenses and those allowed after Final Truing up (in Case No.116 of 2008 dated 17 August, 2009) as shown in the following Table.

Table 106: Difference in Capex-related Expenses approved by Commission for FY 2007-08

Particulars	Audited (Rs Crore)	Allowed after Final Truing up (Rs. Crore)	Difference (Rs Crore)
Depreciation	408.05	382.26	25.79
Advance against depreciation	20.89	46.68	-25.79

Particulars	Audited (Rs Crore)	Allowed after Final Truing up (Rs. Crore)	Difference (Rs Crore)
Interest on Long-term capital	241.54	233.54	8.00
Return on Equity Capital	545.18	499.36	45.82
<b>Total for FY 2007-08</b>			<b>53.82</b>

- 4.3.4 Hence, MSEDCL requested the Commission to adjust the Opening GFA and accordingly revisit the approval of capital expenditure-related expenses for the subsequent years as well.

***Commission's Ruling***

- 4.3.5 The Commission has scrutinised the submissions of MSEDCL, and allowed Rs. 53.82 Crore as claimed for FY 2007-08. However, with regard to the consequential adjustment of Opening GFA and corresponding capital expenditure-related expenses for subsequent period from FY 2008-09 onwards, no computations of such additional claims have been submitted by MSEDCL. For these additional claims, the opening loan, opening equity and opening GFA for the respective years will have to be restated and reconciled vis-a-vis those approved. The Commission notes that the figures of opening GFA, opening equity and opening loan for FY 2013-14 shown in the Petition are different from the closing figures for FY 2012-13 as approved in Case No. 38 of 2014. MSEDCL's response to the Commission's query regarding this difference is not satisfactory. It has submitted that it is difficult to provide reconciliation of loan and equity due to the normative approach followed in earlier Orders. MSEDCL has neither claimed such adjustments nor has it provided any computations or supporting documents for the purpose. MSEDCL needs to reconcile and submit its computation of claims for past periods to enable the Commission to scrutinise, verify and ascertain such claims before they can be allowed. MSEDCL may do so in its next Tariff filing. In this Order, the Commission has allowed only the amount of Rs 53.82 Crore, as claimed by MSEDCL.

**4.4 Income Tax for FY 2011-12 and FY 2012-13**

- 4.4.1 MSEDCL submitted that the Commission, in its Order dated 11 June, 2014 for Truing up for FY 2011-12 and FY 2012-13 (Case No. 38 of 2014), had not approved any Income Tax for FY 2012-13. This was because a detailed break-up of the Tax paid, including interest/ penalty, with supporting challan or the Income Tax return, were not submitted. The Commission allowed MSEDCL to provide the detailed information along with the MYT Petition.
- 4.4.2 MSEDCL has now clarified that it has paid Income Tax on the basis of the assessment order passed by the assessing officer for the relevant year and, it is not a self-assessment tax. The 'Taxpayer's Counterfoil' is itself a 'Challan for payment

of Income Tax' having a unique Challan Identification Number (CIN). Copies of the challans for the Income Tax paid have been submitted to the Commission vide dated 5 May 2014.

- 4.4.3 Therefore, MSEDCL requested the Commission to allow the Income Tax disallowed in Case No. 38 of 2014 as shown in the following Table.

**Table 107: Income Tax for FY 2011-12 and FY 2012-13**

Particulars	Amount (Rs Crore)
Income Tax for FY 2011-12	12
Income Tax for FY 2012-13	65
<b>Total</b>	<b>77</b>

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

- 4.4.4 MSEDCL has now provided the necessary supporting documents proofs for its claim of payment of tax in the past period. After perusing the documents and information submitted by MSEDCL, the Commission allows its claim towards Income Tax paid during in FY 2011-12 and FY 2012-13.

## **4.5 Impact of MSPGCL recoveries**

- 4.5.1 Apart from the claims mentioned in MSEDCL's Petition, the Commission has also considered the impact of its Orders on the following two Petitions of MSPGCL:

- a. Case No. 201 of 2014 Order dated 20 April, 2015 (Capital Cost and Tariff for Bhusawal Units No. 4 & 5), in which the Commission ruled as follows:

*“xxi. The Commission will consider the above total amount of Rs. 1197.67 crore on account of final true up for FY 2012-13 and FY 2013-14 and provisional true up for FY 2014-15 for Bhusawal Units # 4 & 5, including the carrying cost recoverable by MSPGCL from MSEDCL, along with the total fixed charges recoverable by MSPGCL in FY 2015-16 as being determined by the Commission in a separate Order in Case No. 15 of 2015 on the Mid-term Review Petition filed by MSPGCL. Thus, there will be no separate recovery of the amount of Rs. 1197.67 crore, determined by the Commission in this Order.”*

- b. Case No. 15 of 2015 (Mid Term Review of MSPGCL), in which the Commission has undertaken Truing up for FY 2013-14 and FY 2014-15 for MSPGCL and approved a negative amount of 827.44 Crore towards Fixed Charges and a negative amount of Rs 973.29 Crore towards DPC, with holding cost.

- 4.5.2 The total impact of the Orders in Case Nos. 201 of 2014 and 15 of 2015 is summarised in the following Table:

**Table 108: Impact of Case No. 201 of 2014 and Case No. 15 of 2015**

Case No.	Description	Amount (Rs. Crore)
Case No. 201 of 2014	Bhusawal Units 4, 5 - Capital Cost & Tariff Order	1197.67
MSPGCL Truing Up for FY 2013-14 & FY 2014-15 - Case No. 15 of 2015	Fixed Charges	(827.44)
	Late Payment Surcharge (i.e. DPC) of FY 2010-11 to FY 2012-13 yet to be adjusted, with holding cost	(973.29)
	<b>TOTAL</b>	<b>(603.06)</b>

4.5.3 The Commission has thus considered, in this MYT Order, the net impact of its Orders in the above two Cases as a surplus of Rs. 603.06 Crore.

#### **4.6 Impact of Carrying cost**

4.6.1 MSEDCL has sought carrying cost on deferred recoveries for various components approved earlier, but expected to be allowed for recovery in this MYT Order. Further details and computations were sought by the Commission.

4.6.2 In reply, MSEDCL submitted the carrying cost considering the average rate of interest of 12% p.a. (for PFC/REC), as shown in the following Tables.

**Table 109: Carrying cost on account of various expense heads (as per MSEDCL)**

Particulars	Date of MERC/ ATE Order	Applicable from	Date of Recovery of Tariff	Delay in recovery (no. of days)	Amount (Rs. Crore)	No. of Months	Carrying Cost (Rs. Crore)
Balance Gap in Final True Up	11-Jun-14	01-Apr-14	01-Apr-15	365	1,639	12	199
Capex Related Expenses	30-May-14	01-Aug-09	01-Apr-15	2069	54	69	37
Income Tax Disallowed	11-Jun-14	01-Apr-14	01-Apr-15	365	77	12	9

**Table 110: Carrying cost on account of refund as per Order in Case No. 105 of 2013 (as per MSEDCL)**

Date of MERC/ATE Order	Applicable from	Amount (Rs. Crore)	Delay in recovery (no. of days)	No. of Months	Carrying Cost (Rs. Crore)
01-Aug-14	01-Apr-15	6.92	243	8	0.56
01-Sep-14	01-Apr-15	6.92	212	7	0.49
01-Oct-14	01-Apr-15	6.92	182	6	0.42
01-Nov-14	01-Apr-15	6.92	151	5	0.35
01-Dec-14	01-Apr-15	6.92	121	4	0.28

Date of MERC/ATE Order	Applicable from	Amount (Rs. Crore)	Delay in recovery (no. of days)	No. of Months	Carrying Cost (Rs. Crore)
01-Jan-15	01-Apr-15	6.92	90	3	0.21
01-Feb-15	01-Apr-15	6.92	59	2	0.14
01-Mar-15	01-Apr-15	6.92	31	1	0.07
01-Apr-15		6.92			
01-May-15		6.92			
01-Jun-15		6.92			
01-Jul-15		6.92			
	<b>Total</b>	<b>83.00</b>			<b>2.51</b>

4.6.3 The Commission notes that MSEDCL has claimed carrying cost on account of the balance Revenue Gap of the final True Up of FY 2011-12 and FY 2012-13 in Case No. 38 of 2014, capex related expenses, Income Tax disallowed, and on account of refund as per the Order in Case No.105 of 2013.

4.6.4 The Commission is of the view that carrying cost should be allowed on costs approved by it in its previous Orders but whose recovery was deferred. The principles for carrying cost has been laid down by ATE in its Judgment dated 8 April, 2015 in Appeal No. 160 of 2012. Accordingly, the Commission has determined carrying cost on the balance Revenue Gap of the Final True Up of FY 2011-12 and FY 2012-13 in Case No. 38 of 2014. The Commission has computed carrying cost on the balance Revenue Gap of Rs. 1638.80 Crore for the yearly periods at simple rate of interest equivalent to the weighted average of SBI PLR for the respective years FY 2012-13 to FY 2015-16. The total carrying cost thus works out to Rs. 590.10 Crore.

**Table 111: Carrying Cost on account of balance Gap in truing up**

Particulars	Period	Delay in recovery (no. of days)	Amount (Rs. Crore)	Rate of Interest	Carrying Cost (Rs. Crore)
Balance Gap in Final True-Up (Case No. 38 of 2014)	FY 2013-13	182	1638.80	14.61%	98.08
	FY 2013-14	365	1638.80	14.58%	196.70
	FY 2014-15	365	1638.80	14.75%	196.70
	FY 2015-16	183	1638.80	14.75%	98.62
<b>Total</b>					<b>590.10</b>

4.6.5 As regards carrying cost relating to capital expenditure and Income Tax, the Commission notes that these claims were not allowed earlier due to non-submission of details and justification at that time. These are, however, being allowed by the Commission in the present Order considering submission of the



required details and supporting documents now by MSEDCL. Hence, the Commission sees no merit in allowing the claim for carrying cost towards such costs.

- 4.6.6 Further, as regards carrying cost on the amount to be refunded as per Case No. 105 of 2013, the Commission notes that MSEDCL was directed to refund the amount to consumers on account of failure on its part. Thus, allowing carrying cost on the same would not be appropriate or justified.
- 4.6.7 Further, as highlighted in the earlier Chapter on the ARR for FY 2013-14, the Commission notes that there is a surplus of Rs. 1993.17 Crore, excluding the impact of sharing of gains and losses. The Commission has computed the cost of holding this surplus revenue by MSEDCL on similar principles as applicable for determination of carrying cost. The Commission has determined the holding cost for the half yearly period of FY 2013-14, full period of FY 2014-15, and half yearly period of FY 2015-16. The holding cost has been computed at simple rate of interest considering the weighted average of SBI PLR in the respective yearly periods, which are 14.58%, 14.75% and 14.75% respectively. Such cost of holding surplus amounts to Rs. 586.30 Crore.
- 4.6.8 The Commission has set off the cost of holding revenue surplus by MSEDCL against the carrying cost to be recovered.

**Table 112: Net Carrying cost/Holding Cost**

Particulars	Amount (Rs Crore)
Balance Revenue Gap of Final True Up of FY 2011-12 and FY 2012-13 in Case No. 38 of 2014	590.10
Surplus revenue for FY 2013-14	(586.30)
<b>Net adjusted carrying cost</b>	<b>3.80</b>

#### **4.7 Total Revenue Gap**

- 4.7.1 The summary of total Revenue Gap as submitted by MSEDCL and as approved by the Commission is as follows:

**Table 113: Total Revenue Gap / (Surplus) (Rs Crore)**

Particulars	MSEDCL Submission	Approved by Commission
Revenue Gap for FY 2013-14	(261)	(1,981)
Revenue Gap for FY 2014-15	3,442	(269)
Revenue Gap for FY 2015-16	(316)	(2,365)
Balance Gap in Final True Up for FY 2011-12 and FY 2012-13	1,639	1,639

Particulars	MSEDCL Submission	Approved by Commission
Impact of ATE Judgment on Capex Related Expenses	54	54
Refund as per MERC Order (Case No. 105 of 2013)	83	83
Income Tax Disallowed in Case No. 38 of 2014	77	77
Impact of MSPGCL recoveries		(618)
Carrying cost on deferred recoveries		4
<b>Total Revenue Gap of MSEDCL</b>	<b>4,717</b>	<b>(3,376)</b>

## **5 COMPLIANCE OF EARLIER DIRECTIVES**

MSEDCL has submitted the status of compliance of various directives issued by the Commission in previous Tariff Orders, viz. Case Nos. 19 and 134 of 2012 and Case No. 38 of 2014.

### **Directives in Order dated 16 August, 2012 (Case No. 19 of 2012)**

#### **5.1 Consumers with Contract Demand of 1 MW and above**

##### **Directive**

- 5.1.1 *“MSEDCL is directed to submit information on consumers with a contracted demand of 1 MW and above within sixty (60) days. The information should include the details of consumers, industry, total contracted capacity, consumption (in MUs), revenue, etc. The Commission proposes to introduce a new category for such consumers in the next MYT Order.”*

##### ***MSEDCL’s Response***

- 5.1.2 MSEDCL has submitted the information, including names of consumers, Contract Demand, consumption and applicable tariff category.

##### ***Commission’s Ruling***

- 5.1.3 The Commission has noted the information provided.
- 5.1.4 Regarding introduction of a new category of 1 MW and above consumers, in its Order dated 2 January, 2013 in Case No. 50 of 2012, the Commission has considered the issue of tariff determination for consumers having Contract Demand 1 MW and above. The Commission observed that the option of OA provided under Section 42 is an enabling provision, and cannot be interpreted to mean that all such consumers must necessarily avail OA.
- 5.1.5 In view of the above, the Commission has revisited the matter of creating a new tariff category, and does not find it appropriate to discriminate between consumers on the basis of their eligibility for availing OA. Hence, in the present Order, the Commission has not created new tariff category for 1 MW and above consumers.
- 5.1.6 However, consumers with Contract Demand above 1 MW are eligible to avail OA, and the Wheeling Charges and CSS have a bearing on OA transactions. The Commission has elaborated the rationale and principles for determination of Wheeling Charges and CSS separately in this Order. All other categorization-related changes are dealt with in Chapter 6.

#### **5.2 DTC and Feeder Metering**

##### **Directive**

- 5.2.1 *“The Commission observed from the data provided by MSEDCL it is clear that approximately 76% of DTCs have been metered till January 2012. MSEDCL has also submitted in the Petition that some Feeders are yet to be metered. The Commission directs MSEDCL to complete 100% Feeder metering in a period of six (6) months and 100% DTCs within a period of twelve (12) months from the date of issuance of this Order. MSEDCL should also ensure that the mapping of consumers to DTCs is done immediately. MSEDCL is required to submit a metering plan clearly stating the timeline of achieving the various milestones, within sixty (60) days of issuance of this Order. The Agriculture consumption will be decided by the energy readings of separated agriculture meters only. This information shall be submitted to the Commission in the next MYT Petition.”*

***MSEDCL's Response***

- 5.2.2 MSEDCL submitted that, as per the EA, 2003 and the directives issued subsequently by the Commission, it has pursued the implementation of energy accounting at the Feeder and distribution transformer levels. In the process, it has carried out metering of all the existing Feeders, and is charging new Feeders with installation of Feeder meters.
- 5.2.3 DTC metering was taken up by MSEDCL in phases. However, analysis of DTC energy accounting reports revealed such metering is not yielding the desired results, especially in rural areas, on account of constraints such as difficulties in meter reading in scattered /inaccessible locations, lack of monitoring in rural areas, shifting of load on adjacent DTCs during breakdown, delay in updating records such as DTC / consumer mapping, etc.
- 5.2.4 Hence, MSEDCL has decided to restrict the scope of DTC energy accounting to urban areas, and to deal with rural areas through 'Feeder energy accounting'. Going ahead, a concept of Feeder-wise load shedding has already been introduced by MSEDCL, which has been approved by the Commission vide Order in Case No. 41 of 2012.

***Commission's Ruling***

- 5.2.5 The Commission notes that MSEDCL has carried out metering of all the existing 17,131 Feeders. However, information on energy consumption on separated Agriculture Feeders is yet to be submitted. As mentioned in the Order, agriculture consumption can be decided based on the readings of these Feeders. Therefore, the Commission directs MSEDCL to submit the energy consumption on these separated Agriculture Feeders for FY 2013-14 and FY 2014-15 within 60 days.
- 5.2.6 As regards DTC metering, MSEDCL has submitted that, out of 4,52,711 DTCs, only around 2,31,400 (51%) DTC are metered. The decision of MSEDCL to restrict the scope of DTC energy accounting to urban areas only is not proper and cannot be accepted by the Commission. To address the difficulties in DTC metering, MSEDCL will have to explore suitable technical and management solutions to ensure proper functioning and reporting of DTC metering facilities.

- 5.2.7 100% DTC metering, irrespective of urban or rural areas, will have to be carried out by MSEDCL. This is vital for energy accounting. In this context, MSEDCL is again directed to submit the detailed status of Circle-wise DTC metering, and its action plan for accomplishing 100% DTC metering with time-lines to the Commission within 60 days. MSEDCL should also submit the updated status report of DTC metering and energy accounting report of metered DTCs in its next Tariff Petition.

### **5.3 Performance parameters**

#### **Directive**

- 5.3.1 *“The Commission has observed that in the Public Hearing, a large number of consumers have complained about quality of power and services, voltage fluctuation, frequent interruptions and poor availability. MSEDCL, in its next Tariff Petition, should submit the actual circle-wise performance on voltage fluctuation, reliability indices and period of giving supply for FY 2011-12 and FY 2012-13 as against the approved performance standards. The improved quality performance will be considered by the Commission while approving the Tariff in the next Tariff Order.”*

#### ***MSEDCL’s Response***

- 5.3.2 MSEDCL has submitted the requisite data for FY 2011-12 and for FY 2012-13.

#### ***Commission’s Ruling***

- 5.3.3 The Commission has noted the compliance. In its Petition, MSEDCL has also submitted the details of Wires and Supply Availability for FY 2013-14, which are stated to be within the stipulated norms. The Commission has hosted on its website the information on quality of service (standard of performance) of Distribution Licensees, including MSEDCL, for the period FY 2010-11 to FY 2013-14.
- 5.3.4 During the present proceedings, Shri. Vivek Velankar pointed out that MSEDCL has not updated reliability indices data for the last 9 months. CREDAI, Nagpur suggested that the compliance of the Standards of Performance (SoP) needs to be system driven and that, since MSEDCL is implementing ERP, the SoP compliance can be linked with it. In this background, the Commission directs MSEDCL to update the performance indices on a monthly basis on its website. Further, MSEDCL should explore linking the performance parameters as per the SoP with the ERP system, as suggested.

### **5.4 Power purchase from Madhya Pradesh**

#### **Directive**

- 5.4.1 *“The Commission has directed MSEDCL to respond to the objection regarding power purchase from M.P. Madhya Kshetra Vidyut Co. within 30 days of issuance of this Order, with a copy marked to the Commission.”*

***MSEDCL’s Response***

- 5.4.2 From the time of the erstwhile MSEB, power is being supplied by MSEDCL to some consumers in areas bordering Maharashtra but outside the State. Similarly, some consumers of border villages in Maharashtra are being supplied from neighbouring States. These arrangements were made due to technical constraints in releasing power supply from its own distribution system and have continued till now. MSEDCL receives power from Madhya Pradesh for supply to 38 villages situated in Amravati district.
- 5.4.3 However, the present arrangement need not be considered as power purchase from M. P. Madhya Kshetra Vidyut Company. It is also difficult to discontinue the arrangement, which would mean disconnecting power supply to 38 villages of Amravati district.
- 5.4.4 MSEDCL has requested the Commission to consider the issue of tariffs for such Inter-State power supply arrangements.

***Commission’s Ruling***

- 5.4.5 The Commission has noted the response of MSEDCL. The issue has been dealt with in Chapter 6 of this Order.

**5.5 Metering of un-metered Agriculture Consumers**

**Directive**

- 5.5.1 *“The Commission has directed MSEDCL to submit an action plan for metering of all un-metered consumers within 60 days from the date of issuance of this Order.”*

***MSEDCL’s Response***

- 5.5.2 MSEDCL has submitted a revised Action Plan for metering of un-metered agriculture consumers.
- 5.5.3 It has proposed to complete the metering of 20,803 un-metered consumers connected on 100 separated Agriculture Feeders selected from among 9 high agricultural potential Circles in a time bound manner. The estimated cost of phase –I of the metering plan is Rs. 9.01 Crore. In the second Phase, it has proposed to cover an additional 400 separated Agriculture Feeders with 93,200 un-metered consumers by June, 2015. Thus, MSEDCL has proposed to complete metering for 1,14,000 un-metered agriculture consumers by June 2015. The programme for metering of the remaining un-metered agriculture consumers will be planned thereafter, considering the results of earlier phases, the challenges encountered in meter reading, billing, and bill distribution. MSEDCL has proposed the following tentative plan for providing meters to un-metered agriculture consumers.

**Table 114: MSEDCL's Agriculture Metering Plan**

Sr. No.	Financial Year	Un-metered Agriculture consumers proposed to be metered	Estimated Cost of Metering (in Rs. Crore)
1	2014-15	1,14,000	49.74
2	2015-16	1,00,000	43.63
3	2016-17	2,25,000	101.11
4	2017-18	2,25,000	104.15
5	2018-19	2,25,000	107.27
6	2019-20	2,25,000	110.49
7	2020-21	2,50,000	126.45
8	2021-22	2,35,088	122.47
	<b>Total</b>	<b>15,99,088</b>	<b>759.52</b>

5.5.4 However, subsequent to the Public Hearings, MSEDCL submitted that it would submit a revised metering plan for completion of metering of un-metered connection in a shorter period.

***Commission's Ruling***

5.5.5 The Commission observed that MSEDCL has proposed a long duration of 8 years for completion of metering of un-metered agriculture consumers which cannot be accepted.

5.5.6 In response to a query, MSEDCL has submitted that, out of 37,32,563 agriculture consumer connections, around 16,11,963 (i.e. 43%) are still un-metered. As per Section 55 of the EA, 2003, supply of electricity is to be done through a correct meter. Thus, all un-metered consumption must be converted to metered consumption.

5.5.7 MSEDCL's action plan considers a long time-line of around seven to eight years more for the conversion of all un-metered to metered connections. The Commission is of the view that MSEDCL more aggressive time-lines are essential to ensure accurate assessment of consumption in the agriculture sector and also to correctly ascertain Distribution Loss levels.

5.5.8 Accordingly, the Commission directs MSEDCL to complete 100% metering within a period of 3 years. MSEDCL should modify its current metering plan accordingly, and submit the detailed circle-wise revised metering plan for agriculture consumers within 60 days. Priority should be given to metering of un-metered connections with Connected Load in excess of 5 HP. Priority in conversion should also be given to those un-metered agricultural consumers who themselves come forward for it. The region-wise planned metering programme should not constrain such conversion to metered connections for those consumers who seek it.

- 5.5.9 The various difficulties highlighted by MSEDCL as possible roadblocks in implementing the metering plan will have to be addressed by it through suitable technical and management solutions, such as use of remote metering/monitoring with communication facilities in remote areas and fixing of responsibility at appropriate levels for proper functioning and reporting of metering facilities. The Commission directs MSEDCL to submit its quarterly progress reports on the progress of implementation of the metering plan, with its next Tariff Petition.

## **5.6 Third-party Energy Audit**

### **Directive**

- 5.6.1 *“The Commission has directed MSEDCL to appoint a third-party independent energy auditor to carry out a detailed Feeder wise energy audit for some representative Feeders supplying power to un-metered agricultural consumers. This report may be submitted to the Commission along with the report on un-metered agriculture Index determination, which the Commission directed MSEDCL vide Order dated 30 December, 2011 in Case 100 of 2011.”*

### ***MSEDCL’s Response***

- 5.6.2 MSEDCL has submitted the Committee Report on ‘Institution of study to determine the correct specific consumption for un-metered agriculture connections’ (Ref. Case No. 100 of 2011) and Sample Energy Audit of Feeders supplying power to un-metered agriculture consumers (Ref. Case No. 19 of 2012). The Energy Audit Report for sample agriculture Feeders was submitted vide letter dated 21 September, 2013.
- 5.6.3 The Committee’s Report notes that, considering the technical competencies available in MSEDCL, instead of engaging external energy auditors, the activity has been carried out through BEE certified in-house technical expertise under the supervision and guidance of the Internal Committee.
- 5.6.4 The Internal Committee verified the authenticity of the present method for computation of un-metered agriculture consumption. The Committee concluded that the present method of determination of sub-Division-wise un-metered Agriculture Index is well-founded and should be continued for computation of un-metered agriculture sales.

### ***Commission’s Ruling***

- 5.6.5 The Commission observes that the Report is based on analysis of 387 Feeders spread across 39 sub-Divisions over 8 agriculture dominated Zones for one quarter (i.e. April to June 2012).
- 5.6.6 The Commission is of the opinion that in order to ensure credence to the study, verification and validation of methodology, selection of sample Feeders and determination of un-metered Agriculture Index is required to be undertaken



through a third-party agency. As observed in earlier paragraphs, around 43% of agriculture connections are still un-metered and it is expected that with directions given for revised metering plan, MSEDCL shall complete full metering over the next three years.

- 5.6.7 Accordingly, the practice for assessment of agriculture consumption is likely to continue for some time and hence determination of Agriculture consumption Index for un-metered consumption assumes great significance. Third-party independent assessment Energy Audit of the methodology and determination of the Index would ensure independence and transparency required in such an exercise. In view of the above, the Commission will appoint a third-party agency for the methodology and verification of agricultural sales required to determine sub-Division / Division-wise weighted average consumption Index for un-metered agriculture connection.

## 5.7 Outstanding arrears from Distribution Franchisees

### Directive

- 5.7.1 *“The Commission has directed MSEDCL to expedite the process of collection of outstanding arrears from the distribution Franchisees and submit a report on the same within two months from the issuance of this Order.”*

### MSEDCL's Response

- 5.7.2 MSEDCL has submitted the information.
- 5.7.3 In addition, as sought during these proceedings by the Commission, MSEDCL has submitted the following data regarding pending recoveries from Distribution Franchisees upto November, 2014.

**Table 115: Distribution Franchisee Arrears**

Sl. No.	Distribution Franchisee	Total Arrear (Rs. Crore)
1	Nagpur DF	46.60
2	Jalgaon DF	67.09
3	Aurangabad DF*	270.18
4	Bhiwandi DF	34.83
	<b>Total</b>	<b>418.70</b>

*\*(Position up to 16.11.2014, MSEDCL taken over Distribution Franchisee Area from 16.11.2014)*

### Commission's Ruling

- 5.7.4 The Commission observes that the amount to be recovered from Distribution Franchisees is significant and adversely affects the cash flow position of MSEDCL. The Commission notes that the Franchisee Agreements provide for Payment Security Mechanism in the form of Letter of Credit covering payments

equivalent to an average of two months of billing. The Commission directs MSEDCL to submit the steps taken by it to recover pending arrears as per the distribution Franchisee Agreements, including details of its implementation of the Payment Security Mechanism, in its next Tariff Petition.

## **5.8 Reconciliation statement of ZLS account**

### **Directive**

- 5.8.1 *“The Commission has directed MSEDCL to submit the reconciliation statement of ZLS account within 30 days from issuance of this Order. MSEDCL has also been directed to reimburse the entire excess recovery of ZLS scheme within three months from the issue of this Order.”*

### **MSEDCL’s Response**

- 5.8.2 MSEDCL has submitted the ZLS reconciliation statement from time to time. Refund of excess Reliability Charges commenced from the billing month of August, 2012. The excess Reliability Charges pertain to a period of 9 months. Therefore, refund has been made over 9 months.

### **Commission’s Ruling**

- 5.8.3 The Commission has noted the response of MSEDCL.

## **5.9 Pilot project for reorganization of staffing pattern in Amravati**

### **Directive**

- 5.9.1 *“The Commission has directed MSEDCL to address the issues raised by various objectors with respect to implementation of a pilot project for reorganisation of staffing pattern in Amravati.”*

### **MSEDCL’s Response**

- 5.9.2 MSEDCL has always tried to improve its work system for betterment of services and to redress complaints of consumers within specified time limits. While doing so, MSEDCL is very alert regarding the safety of employees and to minimise accidents. Considering these concerns, MSEDCL has introduced a Pilot Project in 6 Urban Divisions from May, 2012.
- 5.9.3 The latest feedback from these Pilot Projects has indicated better maintenance, reduction in accident rate and improved consumer satisfaction.

### **Commission’s Ruling**

- 5.9.4 The Commission has noted the response of MSEDCL.

## **5.10 Refund of pending amounts to PD consumers**

### **Directive**

- 5.10.1 *“The Commission has directed MSEDCL to refund the amount pending to PD consumers in FY 2012-13 and provide a compliance report of the same within one (1) year of this Order.”*

### ***MSEDCL’s Response***

- 5.10.2 MSEDCL has submitted a statement of Zone-wise RLC refund to PD consumers.

### ***Commission’s Ruling***

- 5.10.3 The Commission has noted MSEDCL’s response.

## **5.11 Progress of implementation of Infrastructure Plan at Malegaon**

### **Directive**

- 5.11.1 *“MSEDCL is directed to provide a status report to the Commission regarding progress of the implementation of Infrastructure Plan in Malegaon area along with reasons for delay in implementation. The report may be submitted within sixty days from the date of this Order.”*

### ***MSEDCL’s Response***

- 5.11.2 MSEDCL has submitted the Status Report. It has also submitted the current status of infrastructure in Malegaon covering details of new EHV sub Station and the need for a Circle Office at Malegaon as follows:

#### **New EHV subStation at Malegaon**

- Presently, there is a 132/33 kV, 2x50 MVA sub-Station at Sinnar with a maximum load of 82.4 MVA. In addition, 3 33/11 kV sub-Stations, i.e. 33 kV Datali (1x5 MVA), 33 kV Chass (1x5 MVA) and 33 kV Shaha (1x5 MVA) are sanctioned under Infra II, which are proposed to be connected from 132 kV Sinnar sub-Station.
- MSEDCL shall provide for sufficient spare capacity for catering to additional load at 132 kV Sinnar sub-Station in the event of establishment of 220/33 kV Datali sub-Station. There is good connectivity on 33 kV level by which the load of the existing 132 kV MIDC Malegaon (Sinnar) can be easily diverted to the existing 132 kV Sinnar sub-Station.
- The spare load at the existing 132 kV Sinnar sub-Station, in the event of establishment of 220/33 kV, 3x50 MVA Datali subStation, can be utilized for catering to the existing and proposed load at MIDC Malegaon sub-Station.
- Considering the technical aspects and the proposed load diversion of existing 132/33 kV, 2x50 MVA at Sinnar, 132/33 kV, 2x50 MVA at MIDC Malegaon (Sinnar) and proposed 220/33 kVA, 3x50 MVA at Dattali sub-Station, second

new sub-Station at MIDC Malegaon (Sinnar) is not viable. Review of load growth will be taken in future and, if found technically feasible, a fresh proposal will be submitted to MSETCL for sanction.

Circle Office at Malegaon.

- As per the approved norms for bifurcation, the existing Division should have 8 Sub Divisions and 2,40,000 consumers. However, Malegaon Division has only 6 Sub-Divisions and 1,67,920 consumers.
- For creating a new Circle Office, there should be a minimum of 5 Divisional Offices and 6,00,000 consumers. However, Malegaon, Satana, Manmad, Kalvan and Chandvad Divisions have 5,48,063 consumers.
- The Circle Office is an administrative office which undertakes administrative approvals, data collection, etc. Therefore, as a policy decision, has decided not to add such administrative offices in order to reduce administrative expenses.
- Therefore, considering the above submissions, it will not be advisable for MSEDCL to make Malegaon Division a Circle.

***Commission's Ruling***

- 5.11.3 The Commission has noted the response of MSEDCL. However, MSEDCL is directed to undertake a technical study on the adequacy of the distribution infrastructure considering future load growth in the region, and take suitable measures, including setting up necessary distribution infrastructure, so as to ensure quality of service in the area.

**5.12 High acquittal rate in theft cases**

**Directive**

- 5.12.1 *“On the issue of high acquittal rate in theft cases, MSEDCL is directed to submit a report to the Commission on the actual cases of theft registered, number of cases in which fines have been collected and reasons for high acquittal rate.”*

***MSEDCL's Response***

- 5.12.2 MSEDCL has submitted a report on theft cases registered and fine recovered, with details like the number of raids conducted, theft cases detected, FIRs lodged and amount realized. MSEDCL has also submitted a copy of guidelines issued to field offices to reduce the high acquittal rate in theft cases.

***Commission's Ruling***

- 5.12.3 The Commission observes that, while MSEDCL has furnished statistics, it has not furnished or analysed the reasons for the high acquittal rate. MSEDCL should devise an action plan, undertake management reviews, and provide guidance/training to field officers to reduce the high acquittal rate. The Commission directs MSEDCL to study the reasons for the high acquittal rate and submit its report in its next Tariff Petition.

### **5.13 Bad Debts**

#### **Directive**

- 5.13.1 *“MSEDCL is directed to identify all the arrears that in its opinion are not collectible and write them off from the balance sheet utilising the provisions for bad debts allowed to it over the years in its ARR and submit quarterly report to the Commission starting from the quarter ending September 2012.”*

#### ***MSEDCL’s Response***

- 5.13.2 Bad Debts are written off in the Books of Account on the basis of Board Resolutions for a particular financial year. As such provisions for Bad Debts are not being utilized on quarterly basis, quarterly reports cannot be furnished. However, during FY 2012-13, an amount of Rs. 702.51 Crore has been written off as Bad Debts.

#### ***Commission’s Ruling***

- 5.13.3 The Commission has noted the submission of MSEDCL.

### **5.14 Schedule of Charges**

#### **Directive**

- 5.14.1 *“MSEDCL needs to recover charges as per the Schedule of Charges, which is approved under the provisions of Supply Code Regulations. Therefore, the Commission directs MSEDCL to comply accordingly.”*

#### ***MSEDCL’s Response***

- 5.14.2 Instructions to recover the charges as per the approved Schedule of charges are issued and are also posted on MSEDCL’s website. Presently charges are being recovered accordingly.

#### ***Commission’s Ruling***

- 5.14.3 The Commission has noted the response of MSEDCL. In its Petition, MSEDCL has not proposed any revision in the Schedule of Charges. As requested by MSEDCL, it may file a separate Petition in this regard.

### **Directives in Business Plan Order dated 26 August, 2013 (Case No. 134 of 2012)**

### **5.15 Power Procurement Plan**

#### **Directive**

- 5.15.1 *“MSEDCL shall prepare demand forecast considering both demand actually met and unrestricted demand. Based on such demand profiles, MSEDCL shall prepare its power procurement plan and sales projections thereof.”*

#### ***MSEDCL’s Response***

- 5.15.2 MSEDCL has submitted the source wise details of power procurement in Form 2 of the regulatory format in the MYT Petition. It is very difficult to prepare the month-wise power purchase plan, as projection of sales is a function of various uncontrollable variables such as seasonal variations, economic developments in the State, policies of GoM in respect of agriculture, industry and town planning. Only after continuous analysis of the various external as well internal factors would it be possible to estimate the expected sales in the next few years, and only then can a monthly power procurement plan be finalized. MSEDCL further submitted that there are various factors beyond the control of MSEDCL/ MSPGCL such as hydrological risks, natural calamities, forced shutdown, and non-availability of fuel which affects the power supply. Therefore, it is necessary that any variation in the power purchase plan should be reviewed and allowed in the tariff of the same year itself.

***Commission's Ruling***

- 5.15.3 As explained in earlier Chapters, the Commission has scrutinised and analysed the projected power procurement plan for FY 2015-16 as submitted by MSEDCL. It has applied the principles of optimal power procurement mix considering Merit Order principles for least cost power procurement, and accordingly approved the energy requirement and power procurement mix. The rationale for approval of power procurement quantum and cost for FY 2015-16 has been elaborated in Chapter 3.

**5.16 Retired Assets**

**Directive**

- 5.16.1 *"MSEDCL shall submit the details of assets retired in past and its projection for retirement of assets for FY 2013-14 to FY 2015-16."*

***MSEDCL's Response***

- 5.16.2 Separate data for the assets retired have not been maintained since, whenever an asset is retired, it is withdrawn from use and necessary entries for withdrawing it from the asset records are passed. It is very difficult to predict when an item of asset will become unserviceable, and to make projections about the value of such assets as may become unserviceable in future. Retirement may occur due to sudden breakdowns or other unforeseeable reasons beyond MSEDCL's control. Therefore, MSEDCL has not projected the retirement of assets in FY 2014-15 and 2015-16, and requested the Commission to consider the retirement of assets on actual basis at the time of true-up.

***Commission's Ruling***

- 5.16.3 The Commission has noted the response of MSEDCL. However, the Commission does not agree with MSEDCL's contention that it is not possible to project the retirement of assets. In fact, there are several schemes related to renovation and

modernisation, life extension, etc., for distribution assets which are undertaken after assessing the balance useful life and serviceability of these asset. Hence, it is possible to project their retirement. MSEDCL should maintain its Asset Register with details of useful life for each asset, and consider their retirement once the useful life is over. The Commission shall consider the retirement of assets on actual basis at the time of true-up of the respective years.

## 5.17 Recovery from theft of power

### Directive

- 5.17.1 *“MSEDCL shall project the recovery from theft of power based on its past experience and submit the same in the MYT Petition.”*

### MSEDCL’s Response

- 5.17.2 MSEDCL has submitted the following in this context.

**Table 116: Recovery from Theft of Power**

Sr. No.	Year	Recovery from theft of power (Rs. Crore)
1	2011-12	28.26
2	2012-13	38.09
3	2013-14	~22.00
<b>Projected Recovery</b>		
4	2014-15	39.00
5	2015-16	40.00

### Commission’s Ruling

- 5.17.3 The Commission notes that MSEDCL has projected a higher revenue on account of recovery from theft of power in future years.

## 5.18 Cash flow statements

### Directive

- 5.18.1 *“The Commission directs MSEDCL to submit quarterly cash flow statements for FY 2010-11, FY 2011-12, and FY 2012-13, when submitting its MYT Petition.”*

### MSEDCL’s Response

- 5.18.2 The cash flow statements for FY 2010-11, FY 2011-12, and FY 2012-13 have been submitted.

### Commission’s Ruling

- 5.18.3 From the cashflow statements submitted by MSEDCL, the Commission observes that significant increase in capitalisation and consequent rise in debt service obligations to fund these investments has put a severe strain on the cashflow position of the MSEDCL from FY 2010-11 to FY 2012-13. The Commission also observes that operating cashflow in these years has also suffered because timely revision in tariff could not take place due to delay in filing of MYT Petition. Besides, the cashflow position highlights the need for concerted and focussed efforts for recovery of arrears and improvement in collection efficiency across consumer categories, which would help ease the liquidity position. The Commission directs MSEDCL to submit a status report on the consumer category-wise arrears position and specific efforts taken for recovery of arrears in its next Tariff Petition.

## **5.19 Theft of electricity**

### **Directive**

- 5.19.1 *“The Commission has noted that MSEDCL has not replied to the objection in the matter of theft of electricity. The Commission directs MSEDCL to submit its reply to the Commission and the objectors within 30 days from issuance of this Order.”*

### **MSEDCL’s Response**

- 5.19.2 MSEDCL submitted that Flying Squad personnel are not dedicated entirely to these Squads. They are also responsible for other day to day works. Therefore, it would be unfair to say that MSEDCL is spending more on such drives. Further, no separate account has been kept for expenditure on Flying Squad since they are manned by regular employees of MSEDCL. Details of recovery from theft of electricity have already been submitted to the Commission.

### **Commission’s Ruling**

- 5.19.3 The Commission has noted the response of MSEDCL.

## **5.20 Risk Mitigation Plan**

### **Directive**

- 5.20.1 *“In view of the Commission, MSEDCL needs to do better planning and adopt more relevant risk mitigation measures, which will actually help MSEDCL to mitigate the identified risks. The Commission directs MSEDCL to submit compliance in this regard along with its Petition for MYT for the second Control Period.”*

### **MSEDCL’s Response**

- 5.20.2 In its Business Plan, MSEDCL has identified various risks broadly under the heads of financial risk, regulatory risk, operating risk and technology risk. These risks and their mitigation plan are summarised below:



- 5.20.3 **Shortage of power:** Considering the increasing demand, MSEDCL has tied up about 5500 MW private power through competitive bidding. The overall energy demand of Maharashtra State has been increasing at around 8% per annum in the last 7-8 years. To meet such increase, MSEDCL is trying to source power from the available sources in the market. The power purchase by MSEDCL has recorded an annualised growth rate of 8% over the past 8 years.
- 5.20.4 **Loss of revenue due to lack of metering and unauthorised consumption of electricity:** MSEDCL has implemented the DCL (Distribution Commercial Loss) concept which envisages higher load shedding in areas where recovery is low and Distribution Losses are high. This has yielded very good results in bringing about community pressure to reduce the losses. The community now jointly endeavours to reduce losses so as to have uninterrupted electricity. With such joint efforts, about 85% of the MSEDCL area is load shedding free, and collection efficiency is about 96%-98%.
- 5.20.5 Under an internal reforms programme, MSEDCL has initiated various measures to reduce Distribution Losses, such as monthly energy accounting at Division level/Feeder level/DTC level, metering of DTCs and Feeders, monetary rewards for information on theft, a massive theft control drive, APDRP Schemes for 30 cities, etc.
- 5.20.6 **Improvement in services to consumers:** Consumer service has been a prime focus area for MSEDCL. MSEDCL has taken various consumer service oriented initiatives, such as 13 state of the art Consumer Facilitation Centres (CFCs) at major Urban Centers and 31 small CFCs at Sub Divisions; 24 X 7 operating Centralized Customer Care Centres at Bhandup and Pune for redressal of complaints; online bill payment facility for all LT consumers; facility of receiving bills via e-mail/online by registering on MSEDCL's website; facility of receiving billing and power failure / interruption information via SMS alert to affected consumers; 100% Automatic Meter Reading (AMR) management for all HT consumers; implementation of pre-paid meters, AMR through infra-red (I.R.) and Radio Frequency (R.F.) technology; Testing Labs with advanced metering equipments and accreditation by NABL; implementation of SCADA and ERP under progress; establishment of 11 independent Zonal Consumer Grievance Redressal Forums for redressing consumer complaints, etc.
- 5.20.7 **Project management and execution:** With ambitious infrastructure development plans, MSEDCL has been focusing on better Project Management / Project Planning. Some of the initiatives of MSEDCL for timely completion of Projects are constitution of separate team for execution and monitoring; co-ordination, monitoring and reporting the progress of works by field offices and Corporate office; installation and commissioning of Sub-Stations and Distribution Transformers to mitigate the existing and prospective load demand; Three Tier Quality Control (QC) and Quality Assurance (QA) mechanism for Turnkey

contractors, MSEDCL itself, and third-parties; implementation of ERP PS module for devising projects, monitoring, tracking of progress, invoicing and reporting of projects under progress, with Bhandup Zone having already gone live.

5.20.8 **Regulatory awareness:** MSEDCL has been undertaking better coordination and interaction with the Regulators as well decisions makers at all levels, and putting forward its views during the various meetings at Central and State Levels.

5.20.9 **Employee retention and motivation:** MSEDCL has over 71,312 employees, covering an area of about 300,000 Sq. Kms, supplying electricity to a staggering 2.10 Crore consumers across categories all over Maharashtra, excluding the island city of Mumbai, with an annual revenue of about Rs 47015 Crore (For FY 2012-2013). MSEDCL has highlighted motivating factors such as – (A) Acknowledgement and respect; (B) Camaraderie and Fun; (C) Compensation; (D) Accelerated Growth and Independence, and (E) Personal Development; and has outlined various measures taken for retention of employees. MSEDCL has submitted that, due to structured HR Policies, there has been a decline in the trend of employees leaving it.

***Commission's Ruling***

5.20.10 The Commission has noted the response of MSEDCL.

**Directives in Order dated 11 June, 2014 (Case No. 38 of 2014)**

**5.21 Continuous/ Non Continuous tariff categories**

**Directive**

5.21.1 *“Regarding option to exercise choice between continuous and non-continuous type of supply by consumers connected on express Feeders, the Commission directs MSEDCL to make a separate submission before the Commission, within forty five (45) days from the date of this Order, stating the action taken by it since the date of the objector's application.”*

***MSEDCL's Response***

5.21.2 MSEDCL has proposed to merge express and non-express categories and has suggested a single category in the present Petition.

***Commission's Ruling***

5.21.3 The Commission has dealt with this issue in Chapter 6 of this Order.

**5.22 Income Tax Challan submission**

**Directive**

5.22.1 *“The Commission directs MSEDCL to submit the Tax challan and return for FY 2011-12 and FY 2012-13.”*

***MSEDCL's Response***

5.22.2 MSEDCL has submitted the Tax challan for FY 2011-12 and FY 2012-13.

***Commission's Ruling***

5.22.3 This has been noted by the Commission.

**5.23 Contingency Reserves**

**Directive**

5.23.1 *“MSEDCL is directed to follow the regulatory procedure towards contingency reserve investments for FY 2011-12 and FY 2012-13 and submit the details of investment made with sixty (60) days from the date of this Order.”*

***MSEDCL's Response***

5.23.2 Considering the precarious financial condition and unavailability of sufficient funds to discharge its various liabilities, it was not feasible for MSEDCL to invest in Contingency Reserves. Considering the critical financial situation during FY 2011-12 and FY 2012-13, MSEDCL has not made any contribution to Contingency Reserves.

***Commission's Ruling***

5.23.3 The Commission has noted the response of MSEDCL. As outlined under its Order in Case 38 of 2014, the Commission has not allowed any contribution towards Contingency Reserve during the yearly period for FY 2011-12 and FY 2012-13 for the reasons set out therein.

**5.24 Action Plan for reduction of Distribution Loss**

**Directive**

5.24.1 *“MSEDCL is directed to undertake detailed study of Division wise losses and prepare a milestone based action plan for reducing the losses in all Divisions where the losses are higher than 20%. MSEDCL shall submit the same to the Commission within sixty (60) days from the date of this Order. MSEDCL is also directed to furnish information related to Division wise losses on its website on quarterly basis (Interim Order in Case No. 38 of 2014).”*

***MSEDCL's Response***

5.24.2 MSEDCL has submitted the action plan to the Commission.

***Commission's Ruling***

5.24.3 MSEDCL has targeted to reduce Distribution Loss to less than 20% in 21 Divisions by March, 2015. The Commission directs MSEDCL to submit the status of implementation of the action plan for reducing Distribution Losses in these 21 Divisions within 60 days.

## **6 TARIFF PHILOSOPHY, TARIFF DESIGN AND CATEGORY-WISE TARIFFS FOR FY 2015-16**

### **6.1 Overall Approach for Tariff Design**

6.1.1 In the present Order, the Commission has kept in view the main objects of the EA, 2003, as set out in its Preamble, including the protection of the interest of consumers, the supply of electricity to all areas and the rationalisation of tariffs. The EA, 2002 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.

6.1.2 The provision of electricity is an essential driver for development, and also influences social and economic change. The Commission, in this Order, has endeavoured to ensure that, while industries and commerce are promoted, it is not at the cost of other segments of society. The Commission has also sought to ensure regulatory consistency for all stakeholders and a reasonable return for the Licensee.

6.1.3 In this context, some of the main tariff-related features of this Order are summarized below:

#### **A] Reduction in Tariff for Industries and rationalization of ToD:**

6.1.4 The Commission has taken note of the views expressed during the public consultation process that the MSEDCL tariff for industries is considerably higher than in neighbouring States. The price of electricity, both in absolute and in relative terms, is an important factor in the competitiveness of industry. With the increase in availability of power in the State and with a projected revenue surplus, the Commission has striven to reduce the Energy Charges for industry, albeit with a marginal increase in Fixed Charges. The Commission has also ensured that the additional revenue accruing from some reduction in the ToD rebate during off-peak hours is used to reduce Energy Charges across the same categories of consumers. It is envisaged that the overall average price of electricity for industry would be significantly lower than the prevailing prices, and that the ABR for industry (HT and LT) would reduce by around 7%.

#### **B] Tariff for domestic category:**

6.1.5 The tariff for domestic category is below ACoS, which needs to be increased gradually. However, the Commission has reduced Energy Charges for domestic/residential consumers particularly for consumers with consumption below 100 units per month, and only marginal increase for consumption upto 300 units per month, with marginal increase in Fixed Charges. Further, the Commission has retaining the benefit of telescopic slabs, which will benefit all domestic consumers.

#### **C] Creation of separate category for Powerlooms:**

- 6.1.6 During the proceedings, the Commission has received number of suggestions for a separate category of Powerlooms, as exists in some other States. It is understood that, out of 24 lakh Powerlooms in India, around 8 lakh are in Maharashtra. These provide direct employment opportunities for nearly 10 lakh persons and around 50 lakh persons are dependent on the Powerloom business. In the past, there was a separate tariff category for Powerlooms in Maharashtra, which was discontinued. Accordingly, the Commission has decided to revive a separate sub-category for Powerlooms within LT Industries, with Energy Charges lower than for the remaining sub-category LT Industries – Others.

**D] Encouragement to Cold Storages:**

- 6.1.7 The Commission recognizes that cold storages play an important role in various segments of economic activities for preserving the nutritional and economic value of various products and commodities such as agricultural produce (fruits/vegetables), dairy products, meat and fish products, pharmaceuticals and vaccines, horticultural products, beverages, etc. Cold storages are an important link in the chain for adding value and reducing the large wastage of agricultural and allied products by expanding the scope for storage and sale, with or without further processing, for local or export markets. However, by their very nature, cold storages are relatively power-intensive, and the cost of power is a significant factor in their viability. Moreover, for optimal utilization of their capacities, cold storages may have to cater to different commodities and applications at different times. Accordingly, upon careful consideration of these aspects, the suggestions made by industry and others during the public consultations, and the views of MSEDCL, the Commission has decided to broaden the existing tariff treatment of cold storages and to consider them in two categories, namely (a) Cold Storages for Agriculture Products; processed or otherwise and (b) Cold Storages for other purposes. While the tariff of Agriculture – Others (Metered) category shall be applicable for Cold Storages for Agriculture products, the latter would be covered under the Industry instead of the Commercial category as at present.

**E] Lower Tariff for Government Hospitals and Educational Institutions:**

- 6.1.8 The Commission appreciates that there is a merit in having separate consumer category consisting of all Government Educational Institutions and Hospitals/Health Centres. Accordingly, the Commission in the light of ATE Judgment has divided Public Services into two categories i.e. (A) Government Educational Institutions and Hospitals and (B) Other Public Services. The Commission has approved a lower tariff for the former sub-category.

**F] Streetlights:**

- 6.1.9 Street lighting is important for the movement of people and transport, and in providing security. Therefore, the Commission has continued its approach of encouraging street lighting, not only in urban but also in rural areas by maintaining Tariff for this category below Average Cost of Supply.

**G] Domestic Water Supply**

- 6.1.10 Considering the difficulties and challenges faced with regard to providing adequate water, particularly in the rural areas (through Rural Water Supply schemes), Public Water Works need to be facilitated and the tariff for this category has been maintained below the ACoS.

**H] Metro / MonoRail**

- 6.1.11 The Commission notes the ongoing development of Metro rail services in Maharashtra as a means of mass public transportation. However, at this stage, the Commission is not inclined to place the Metro rail services at par with Railways in terms of tariff. The Commission is in the process of further understanding the powers requirement of Metro, and its tariff has for the time being been determined on a two-part basis at a rate marginally higher than the tariff applicable to Railways.

**I] Payment discipline:**

- 6.1.12 The Commission is deeply concerned about the persistent delays in payments by MSEDCL, reflected by unacceptably large and mounting DPC liabilities which MSEDCL has incurred and has projected in its Petition. Such payment delays also jeopardise the finances and working of other Utilities. The Commission observes that the Tariff of all stakeholders is determined on Cost-plus method and, therefore, it is not clear to the Commission as to why Utilities delay in making timely payment as laid down in agreements or Orders. The Commission is of the view that the stakeholders are required to devise an effective mechanism to curb this unfortunate practice and to ensure that timely payment is made to all the parties. The MSEDCL is directed to lay down a transparent system by which payment to all the suppliers are systematically and regular made. This will not only negate the need for Delayed Payment Charges but would also enable all stakeholders to plan their finances in a reasonable and cost effective manner. This should be submitted to the Commission within 3 months.
- 6.1.13 The Commission has extensively dealt with the issue of delay in payment of Transmission Charges by TSUs under its Order in Case No. 57 of 2015. In the said Order, the Commission has issued necessary directions to STU to approach the Commission, with its suggestions for dealing with past payment arrears and minimising future delays, through a Petition.
- 6.1.14 In case of Generating Companies, the PPAs provide for payment security mechanism. The Commission directs MSEDCL to provide the status of operationalisation of such payment security mechanisms under the PPA alongwith the next Tariff Petition.

**J] Agriculture Metering:**

- 6.1.15 As per Section 55 of the EA, 2003, Licensees are required to supply power to all consumers through correct meters. However, after even more than a decade, as many as 16 lakh out of 37 lakh (around 43%) agricultural consumers are being supplied through un-metered connections, which has had an adverse impact on other consumers. The pace of initiatives even on metering at the DTC level is rather slow, and only around 51% out of the total of 4.5 Lakh DTCs have so far been metered. The Commission has given certain directions to address this important issue.

**K] Agriculture Subsidy:**

- 6.1.16 The Commission recognises the need to provide support to the Agriculture sector. Therefore, it has consistently kept the tariff for Agricultural consumers very low as compared to the ACoS. Even after the marginal increase in this Order, particularly for un-metered connections, the Agricultural tariff would be only around 50% of the ACoS. In addition, GoM is providing a substantial subsidy against even this lower tariff under Section 65 of the EA, 2003. However, it is noticed that despite the subsidy the residual recovery from the Agriculture sector is only around 38% of the billed amount. Agriculture consumption is approximately 24% of total electricity sales of MSEDCL. The lower recovery here severely affects the finances of the Utility. The Commission opines that it is necessary for the Government to address this issue seriously and perhaps be more focussed in its distribution of subsidy. There is a possibility that the time has come for Government to consider categorisation of Agriculture subsidy based on some transparent objective criteria.

**L] Facilitation of Open Access through revised Cross-Subsidy Surcharge formula:**

- 6.1.17 The option of OA for eligible consumers is intended to encourage competition and choice, while keeping in view the concerns of the Licensee and its other consumers. Exercising the option of OA depends upon several factors, including the prevalent retail tariff and the applicable OA Charges. Within the framework of the Distribution OA Regulations, 2014, the Commission has revised the formula adopted for CSS determination. This is expected to cushion the impact on CSS which would have resulted from application of the formula applied earlier, and better facilitate OA.

**M] Improvements in Customer Service and consumer outreach:**

- 6.1.18 The Commission has taken note of several difficulties and challenges expressed by consumers regarding redressal of their grievances qua metering, billing and payment issues during public process. The Commission has advised MSEDCL to improve upon their consumer outreach activities and extend use of technological solutions through mobile alerts, e-bills through emails and more payment options to facilitate online payment & other modes of payment gateways. The Commission

has also issued necessary directions as regards compliance to standard of performance and web publication key performance parameters on regular basis.

- 6.1.19 In general, the movement of tariffs towards the ACoS has been maintained such that inter-class cross-subsidy is reduced over the period. The Commission has also tried to ensure that even the intra-class cross-subsidy, i. e., the cross-subsidy provided by consumers in other slabs within the same category, is reduced, by reducing the difference between the highest and lowest slab rates.
- 6.1.20 The Commission therefore with the above key objectives has undertaken the Tariff determination process. The Commission observes that the inflation within our economy is close to 7% annually however, the Commission has endeavoured to keep the impact of Tariff to the minimal possible with the aim and object to promote economic development and socio- economic change.
- 6.1.21 The Commission believes that, if the goal of speedy economic growth combined with 24 x 7 electricity for all is to be achieved, it has to be appreciated that there are upward pressures on electricity tariffs because of likely increases in input costs and the need to invest in strengthening and augmenting the network and other infrastructure. Moreover, industrial and commercial consumers, in particular, will continue in the foreseeable future to pay higher tariffs in order to cross-subsidise agriculture and lower end residential consumers so as to keep their tariffs relatively low.
- 6.1.22 Thus, while electricity is one of the most important drivers of economic growth, the cost and tariffs of electricity are driven by multiple factors. All stakeholders, including the State Government, need to make concerted efforts to sensitize the public regarding the need to conserve electricity, not merely through more sophisticated DSM measures, but also through easily achievable and simple steps like switching off lights, fans and air conditioners, when not in use, and by consciously reducing their use when required. The time has come to accept this reality and take steps to control electricity consumption with the same meticulousness with which other household and business activities are controlled.

## **6.2 Applicability of revised Tariffs**

- 6.2.1 The revised Tariffs as per this Order shall be applicable from 1 June, 2015. 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 respective period arrived at on the basis of average unit consumption per day multiplied by number of days in the respective period falling under the billing cycle).



- 6.2.2 The Commission has determined the revenue from the revised tariffs as if they are applicable for the entire year. Any shortfall or surplus in actual revenue vis-à-vis the approved revenue requirement will be trued up in the next tariff determination process.

### **6.3 Consolidated Revenue Gap**

- 6.3.1 MSEDCL has estimated a Revenue Gap of Rs. 4,717 Crore. To recover this, it has proposed a revision in tariff for FY 2015-16, with an average increase of 8%. However, the Commission has approved a revenue surplus of Rs 3,376 Crore as elaborated in Chapters 3 and 4 of this Order. This results in an overall tariff reduction of 5.72% as compared to the tariff at the time of filing of the Petition (February, 2015), and a reduction of 2.44% as compared to the tariff at the beginning of FY 2015-16 (i.e. in April, 2015).
- 6.3.2 In the present tariff determination, the Commission has not considered the impact of Rs. 1,240.04 Crore approved in the final true-up for MSPGCL for FY 2012-13 in Case No. 122 of 2014. In that Order, the Commission has allowed recovery of this amount in six monthly instalments, and MSEDCL was allowed to pass it on to consumers as per the provisions of the MYT Regulations.
- 6.3.3 Inclusion of this amount would have resulted in spreading out the recovery from consumers over the entire year as a part of tariff, even though MSEDCL has to pay it to MSPGCL in six months from April, 2015. Moreover, a part of this amount would already have been recovered in April and May, 2015. Therefore, the Commission has continued the recovery of the remaining amount as per the methodology stipulated in its Order in Case 122 of 2014.

### **6.4 Tariff Philosophy proposed by MSEDCL and Commission's Rulings**

- 6.4.1 MSEDCL has proposed certain changes in the Tariff Philosophy and Tariff Design in its Petition. MSEDCL's submissions and the Commission's rulings are set in the following paragraphs.

### **6.5 Full Cost Recovery**

#### ***MSEDCL's submission***

- 6.5.1 MSEDCL has submitted that its Petition is based on full cost recovery of the Revenue Gap computed for the MYT Control Period. The remaining available period for recovery through MYT in the current Control Period is only 1 year. Tariff revision has been proposed as MSEDCL needs to work on commercial principles to sustain growth and avoid financial losses, and at the same time protect the consumers from tariff shock.

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

- 6.5.2 The Commission has worked out the total revenue requirement for FY 2015-16, including necessary adjustments for past years' gaps and surpluses, as detailed in Chapters 3 and 4. Though the revised tariffs are applicable from June 1, 2015, the Commission has determined the revenue from such tariffs for the entire year FY 2015-16. Any shortfall/surplus in actual revenue vis-à-vis the approved revenue requirement will be trued up in the next tariff determination process.

## 6.6 Economical Use of Electricity

### *MSEDCL's submission*

- 6.6.1 MSEDCL has proposed that the Commission may include such provisions in its Order, so that the electricity is used efficiently by all consumers and consumers pay reasonable tariff. MSEDCL Appropriate price signals may be given for restricting consumption by encouraging efficient use of electricity.

### *Commission's Ruling*

- 6.6.2 The Commission has kept in view the key objectives of the EA, 2003 including promotion of competition, protection of the interest of consumers and encouraging economy and efficiency in the use of electricity. The Commission has to strike a balance between promoting efficient use of electricity through appropriate price signals and the reasonability of tariff, without tariff shock to any category. Further, the Commission has separately approved DSM expenses which would encourage adoption of energy efficiency measures.

## 6.7 Rationalization of Fixed Cost

### *MSEDCL's submission*

- 6.7.1 MSEDCL has proposed increase in Fixed/Demand Charges for all consumer categories, except HT Agriculture, LT Agriculture – Metered and LT Domestic, Below Poverty Line (BPL). The following Table summarizes the consumer category-wise Fixed Charges/ Demand Charges at existing tariffs, and as proposed by MSEDCL in the present Petition.

**Table 117: Category-wise Fixed/ Demand Charges – Existing and Proposed**

Categories	Unit	Existing	Proposed
<b>HT Category</b>			
HT I: HT – Industry	Rs. / kVA/Month	190	220
HT II: HT – Commercial	Rs. / kVA/Month	190	220
HT III: HT – Railways	Rs. / kVA/Month	Nil	Nil
HT IV: HT – Public Water Works (PWW)	Rs. / kVA/Month	190	220
HT V: HT – Agriculture	Rs. / kVA/Month	30	30
HT VI: HT – Bulk Supply (Residential)	Rs. / kVA/Month	160	220

Categories	Unit	Existing	Proposed
HT VIII: HT – Temporary Supply	Rs. / kVA/Month	250	290
HT IX: HT – Public Services	Rs. / kVA/Month	190	220
HT X: HT – Ports	Rs. / kVA/Month	190	220
<b>LT Category</b>			
LT I: LT – Residential			
(A) BPL (0-30 Units)	Rs./Connection/Month	10	10
(B) Consumption > 30 Units per month			
- Single Phase	Rs./Connection/Month	40	50
- Three Phase	Rs./Connection/Month	130	150
LT II – Non-Residential			
(A) 0-20 kW	Rs./Connection/Month	190	220
(B) > 20 kW and $\leq$ 50 kW	Rs. / kVA/Month	190	220
(C) > 50 kW	Rs. / kVA/Month	190	220
LT III: LT – Public Water Works (PWW)			
(A) 0-20 kW	Rs. / kVA/Month	50	60
(B) > 20 kW and $\leq$ 40 kW	Rs. / kVA/Month	60	70
(C) > 40 kW	Rs. / kVA/Month	90	105
LT IV: LT – Agriculture			
<i>Un-Metered Tariff</i>			
<i>Zones with (Above 1318 Hrs/HP/Annum)</i>			
<i>0-5 HP</i>	Rs. / HP / Month	353	353
<i>Above 5 HP</i>	Rs. / HP / Month	383	383
<i>Zones with (Below 1318 Hrs/HP/Annum)</i>			
<i>0-5 HP</i>	Rs. / HP / Month	268	268
<i>Above 5 HP</i>	Rs. / HP / Month	293	293
<i>Metered Tariff (Including Poultry Farms)</i>	Rs./HP/Month	20	20
LT V: LT – Industry			
<i>0-20 kW (up to and including 27 HP)</i>	Rs./Connection/Month	190	220
<i>Above 20 kW (above 27 HP)</i>	Rs. / kVA/Month	130	150
LT VI: LT – Street Lights	Rs. / kVA/Month	40	50
LT VII: LT – Temporary Supply			
(A) Temporary Supply Religious (TSR)	Rs./Connection/Month	250	290
(B) Temporary Supply Others (TSO)	Rs./Connection/Month	310	360
LT VIII: LT – Advertisements and Hoardings	Rs./Connection/Month	500	575
LT IX: LT – Crematorium & Burial Grounds	Rs./Connection/Month	250	290
LT X: LT – Public Services			

Categories	Unit	Existing	Proposed
(A) 0-20 kW	Rs./Connection/Month	190	220
(B) > 20 kW and $\leq$ 50 kW	Rs. / kVA/Month	190	220
(C) > 50 kW	Rs. / kVA/Month	190	220

- 6.7.2 Considering the additional availability of power resulting in uninterrupted power supply to most consumers, MSEDCL submitted that the Fixed Charges need to be gradually increased so as to recover the fixed component of its expenses through such Charges. MSEDCL has quoted the following rulings of the Commission in Case Nos. 72 of 2007 and 111 of 2009.

Order in Case No. 72 of 2007:“.....As and when sufficient power is available and contracted by the licensees, the Fixed Charges can again be increased, and Energy Charges reduced correspondingly.”

Order in Case No. 111 of 2009: “.... once sufficient power is available and contracted by the licensees, the Fixed/ Demand Charges can again be increased, and Energy Charges reduced correspondingly.”

- 6.7.3 MSEDCL has categorically stated that it has contracted enough power to meet the - increasing demand. Segregating its proposed ARR for FY 2014-15, based on certain assumptions, MSEDCL has worked out 40% of its total cost as fixed, against which it submitted that the Commission has allowed only 14% recovery through fixed components of tariffs. MSEDCL emphasized that this lower recovery of Fixed Charges is against the basic principles of recovery as accepted by the Commission itself.

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

- 6.7.4 The Commission, in its Order in Case No. 72 of 2009, had reduced the Fixed/ Demand Charges on account of high power deficit in MSEDCL's area.
- 6.7.5 During the public consultation process, many consumers have strongly opposed the proposal of MSEDCL to increase Fixed/ Demand Charges. However, it should be noted that the approved expenses of MSEDCL need to be recovered through the tariff, by way of Fixed Charges or Energy Charges or both. Therefore, not increasing the Fixed Charges will result in a corresponding impact on Energy Charges.
- 6.7.6 With regard to the levy of Fixed Charges / Demand Charges, the Commission has explained the rationale for the same in previous Tariff Orders. This is also in accordance with the EA, 2003 and the Tariff Policy notified by the MoP, GoI. At present, the Fixed Costs constitute around 54% of the ARR of MSEDCL, whereas revenue recovery through Fixed Charges constitutes around 14.6% of the total revenue. Levy of Fixed Charges and Demand Charges do not result in any windfall gain to MSEDCL, since it is recovering only a part of the Fixed Costs through such Charges. With the proposed increase, revenue recovery from Fixed Charges would

increase to only around 16.8% of total revenue. As rationalization of Energy Charges has also been undertaken simultaneously, the proposed rationalization in Fixed Charges is unlikely to result in a significant tariff burden for consumers.

- 6.7.7 The Commission has noted the increase in the supply availability of MSEDCL. Further, as per CEA's Load Generation Balancing Report, against the anticipated energy shortage of 9.6%, Maharashtra has experienced a much lower energy shortage of 2.1% in FY 2013-14. The Commission also notes the significant increase in power availability as projected by MSEDCL for FY 2015-16. Therefore, the Commission is allowing the increase in Fixed Charges as sought by MSEDCL.
- 6.7.8 However, the Commission also notes that HT III-Railways is the only metered category having a single-part tariff with no Demand/Fixed Charges, and only Energy Charges are applicable to this category for historical reasons. The rationale for recovery of Fixed Cost through Fixed Charges applies to this category as well. In this context, the Commission observes that a two-part tariff structure (i.e. Demand Charge and Energy Charge) exists for Railways in other States as well as other Distribution Licensees in Maharashtra.. However, MSEDCL has not submitted any proposal in this regard. Further, introduction of any new tariff structure would require careful examination of all aspects, including modification to metering facilities, billing mechanism, revenue and tariff implications for consumers and other technical considerations. Therefore, the Commission directs MSEDCL to should study the possibility of introducing a two-part tariff for HT III-Railways in future, and accordingly submit a proposal in this regard in its next Tariff Petition.

## **6.8 Determination of Wheeling Charges and Cross-Subsidy Surcharge**

### ***MSEDCL's submission***

- 6.8.1 Referring to the provisions of EA, 2003, the Regulations and various Orders of the Commission, MSEDCL has drawn attention to the requirement of imposition of both CSS and Additional Surcharge on OA consumers. MSEDCL requested the Commission to determine the OA charges, Wheeling Charges and CSS every time tariff is determined.

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

- 6.8.2 The Commission has dealt with the Wheeling Charges, CSS and Additional Surcharge in paragraphs 6.46, 6.48 and 6.9 respectively.

## **6.9 Need for determination of Additional Surcharge**

### ***MSEDCL's submission***

- 6.9.1 MSEDCL submitted that, owing to the considerable quantum of OA transactions on the one hand, and MSEDCL entering into power tie-ups on the other is resulting

in a situation of stranded generation capacity and under-recovery of Fixed Costs. The burden of Fixed Cost is affecting the viability and sustainability of operations of MSEDCL, which ultimately adversely affects consumers buying power from MSEDCL. Hence, to mitigate this, it would be appropriate to determine an Additional Surcharge for OA consumers.

***Commission's Ruling***

- 6.9.2 MSEDCL has referred to Section 8.5 of the Tariff Policy, which provides as follows regarding of CSS and applicability of Additional Surcharge to be paid by OA consumers.

*“8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable **only if it is conclusively demonstrated** that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.”*

- 6.9.3 Section 8.5 of the Tariff Policy requires ‘conclusive demonstration’ of continued stranded power purchase commitments. MSEDCL has sought determination of Additional Surcharge without any supporting documentation or substantiation with facts and figures required in this context. The Commission is of the view that Additional Surcharge cannot be considered unless it is conclusively demonstrated that, as result of OA transactions, MSEDCL is burdened with stranded power purchase commitments.

- 6.9.4 Regulation 18 of the Commission’s Distribution OA Regulations, 2014 outlines the principles for determination and levy of Additional Surcharge as below:

*“18.2 This additional surcharge shall become applicable only when due to the Open Access being granted or having been granted, the obligation of the Distribution Licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract.*

*18.3 The Distribution Licensee shall submit to the Commission a detailed calculation statement of fixed cost which the Distribution Licensee is incurring towards his obligation to supply along with its Tariff Petition and also shall submit its separate petition for truing up of on yearly basis based on actual expenses incurred vis-à-vis those approved by the Commission, for the prudence check and approval of the Commission.*

*18.4 The Commission shall determine category wise additional surcharge to be recovered by Distribution Licensee from Open Access consumers, based on the following principles:*

- (i) *The cost must have been incurred by the Distribution Licensee or is expected, with reasonable certainty, to be incurred on account of such consumer; and*
- (ii) *The cost has not been or cannot be recovered from the consumer, or from other consumers who have been given supply from the same assets or facilities, or from other Consumers, either through wheeling charges, standby charges or such other charges as may be approved by the Commission in exercise of powers under Section 64 of the Act:*

*Provided that the additional surcharge so determined by the Commission shall be applicable to all the consumers who have availed Open Access to receive supply from a source other than the Distribution Licensee to which they are connected.”*

- 6.9.5 With these considerations, the Commission has decided not to consider the request of MSEDCL to levy Additional Surcharge on OA consumers at this stage.

## **6.10 Merger of Continuous and non-Continuous Category**

### ***MSEDCL's submission***

- 6.10.1 MSEDCL submitted that in the past, due to severe power shortage, Continuous and non-Continuous consumer sub-categories were created by the Commission, depending on exemption from the weekly staggering day of load shedding. Accordingly, consumers receiving the benefit of reduced load shedding hours are charged higher, i.e. the Energy Charges for consumers on express Feeders (Continuous) are higher than for consumers on non express Feeders (non-Continuous).
- 6.10.2 MSEDCL has proposed to merge the two sub-categories, as the distinction in power supply to these categories no longer exists. Owing to sufficient availability of power, load shedding has been withdrawn and all HT Industrial consumers are availing 24x7 supply. MSEDCL also referred to a number of litigations in various forums due to the difference in tariffs.
- 6.10.3 MSEDCL has proposed to bridge the gap in tariff between Continuous and non-Continuous sub-categories. It has proposed that the Fixed as well as Energy Charges payable by both Continuous and non-Continuous consumers on Express and non-Express Feeders be the same.

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

- 6.10.4 The Commission is of the view that the sufficient power availability scenario, as claimed by MSEDCL, is very recent. However, since the power availability situation has improved, the Commission intends to bridge the tariff gap between Continuous and non-Continuous sub-categories gradually so as to avoid any tariff shock or windfall gain to either. The proposal submitted by MSEDCL would result

in a tariff shock to non-Continuous consumers, whose tariff will have to be increased to bridge the gap. Therefore, the Commission has decided to continue with separate Continuous and non-Continuous sub-categories for the time being, but reduce the tariff gap between them.

- 6.10.5 At present, the difference in Energy Charges between consumers on Express Feeders and Non-Express Feeders is in the range of Rs 0.81 per unit (HT I - Industry), Rs 0.74 per unit (HT II - Commercial) and Rs 0.64 per unit (HT IX - Public Service). The impact on the tariff for consumers in these sub-categories arising from MSEDCL's proposal and the consequent impact on the revenue from them cannot be ignored.
- 6.10.6 The differentiation in terms of Energy Charges applicable to these sub-categories has evolved over a period of time for historical reasons. Besides, the Energy Charge component also includes a component of Fixed Costs of MSEDCL since only a part (~16.8%) of Fixed Costs is recovered through Fixed Charges (i.e. Demand Charges). The consumers on Express Feeders have been receiving uninterrupted supply and have been spared from load shedding in the past. Hence, the Commission believes that any movement towards merging of the two sub-categories and uniform tariffs will have to be gradual. Accordingly, in this Order, the Commission has reduced the gap between Energy Charges for consumers on Express Feeders and Non-Express Feeders. The net difference in approved Energy Charges for consumers on Express Feeders and Non-Express Feeders under these sub-categories work out to Rs. 0.50 per unit (HT I - Industry), Rs. 0.53 per unit (HT II - Commercial) and Rs. 0.48 per unit (HT IX - Public Services Others).
- 6.10.7 The Commission clarifies that the consumer availing supply on express Feeder may exercise his option to choose between Continuous and non-Continuous supply anytime during a financial year but only once in such financial year with one month prior notice. Such consumer shall be required to submit a written request to MSEDCL, giving one month's notice and the Tariff applicable to non-Continuous supply shall apply, from the ensuing billing cycle.

## **6.11 Introduction of new Tariff slabs for Residential Category**

### ***MSEDCL's submission***

- 6.11.1 MSEDCL has proposed changes in the existing consumption slabs as well as telescopic structure in the Residential category, excluding the BPL sub-category. In its additional submission after the Public Hearings, MSEDCL made a few amendments in the proposed slab structure, but maintained its proposal of shifting from telescopic to non-telescopic structure, which would be telescopic within a particular slab. The existing and proposed slab structure for the Residential category is summarised as below:



**Table 118: Residential Slabs – Existing and Proposed**

S. No.	Existing (Telescopic)	Proposed (Non-Telescopic but telescopic within particular slab)	
		Petition	Additional Submission
1	0 - 100 units per month	0 - 125 units per month	0 - 100 units per month
		a) 0 - 75 units	
		b) 76 - 125 units	
2	101 - 300 units per month	126 - 300 units per month	101 - 300 units per month
		a) 0 - 125 units	a) 0 - 150 units
		b) 126 - 300 units	b) 151 - 300 units
3	301 - 500 units per month	301 - 500 units per month	301 - 500 units per month
		a) 0 - 125 units	a) 0 - 150 units
		b) 126 - 300 units	b) 151 - 300 units
		c) 301 - 500 units	c) 301 - 500 units
4	501 - 1,000 units per month	501 - 1,000 units per month	Above 500 units per month
5	Above 1,000 units per month	Above 1,000 units per month	

***Commission's Ruling***

- 6.11.2 MSEDCL has proposed to recover a substantial portion of its proposed Revenue Gap of Rs. 4,717 Crore from the Residential category, to the extent of Rs 2,362 Crore, along with proposed revision on two counts – (a) re-defining of Residential consumption slabs; and (b) switching over from the existing telescopic to a non-telescopic tariff structure, which result in additional revenue around 22% higher than through existing tariff. The Commission also noted a substantial re-distribution of number of consumers and consumption quantum within the slabs without proper justification. Considering the fact that the proposed re-structuring may result in a substantial increase in tariff in certain slabs levels, and also in the absence of sufficient data to substantiate significant changes in the proportion of sales and number of consumers proportions between different slabs, the Commission has decided to continue with the basic format of the existing consumption slabs as well as the telescopic structure of the Residential category.

## **6.12 Tariff for Agriculture Consumers, LT Industrial above 20 kW and Street Lights**

***MSEDCL's submission***

- 6.12.1 MSEDCL has proposed no increase in tariff for the Agriculture consumers, considering the difficulties faced by them. Regarding LT Industrial (above 20 kW) category, MSEDCL has proposed to bring its tariff equal to the level of HT

Industrial category. In the case of Street Lights, MSEDCL submitted that many Municipal Corporations and other local bodies are neither shifting to energy efficient lighting systems, nor using them diligently (only during evening and night hours), due to absence of proper price signals. MSEDCL proposed to rationalize the tariffs for Street Lighting for Gram Panchayats and A, B & C Class Municipal Councils to the level of ACoS, and for Municipal Corporation Area to around 5% more than the ACoS.

***Commission's Ruling***

- 6.12.2 Agriculture consumers comprise approximately 16% of the total number of consumers, and their cross-subsidy level is in the range of 42% to 52%. The mandate of the Tariff Policy is to bring down the cross-subsidy levels to  $\pm 20\%$  of the cost of supply. However, recognizing the difficulties being faced by Agriculture consumers across the State, the Commission has only marginally increased the tariff and reduced the cross-subsidy level for metered Agricultural consumers
- 6.12.3 However, in order to further encourage the metering of un-metered Agriculture connections, the percentage increase in the tariff of un-metered connections is higher than for metered consumers so that conversion to metering becomes more attractive.
- 6.12.4 Taking into consideration the strong views expressed by many during the public consultation process, and also as suggested by MSEDCL, the Commission has substantially reduced the Energy Charges of LT Industry Category (Above 20 kW) from existing levels. In the last Tariff Order in Case No. 19 of 2012, the Energy Charges of HT Industry – Express Feeder and LT Industry (Above 20 kW) had been kept at the same level. In the present Order, the Commission has brought down the Energy Charges of LT Industry (Above 20 kW) by 23 paise per kWh lower as compared that of HT Industry – Express Feeder.
- 6.12.5 Street Lights are a special type of public service, which is associated with safe travel as well as security of the public. The Commission believes that the safety and security of the general public, and of women in particular, on thoroughfares cannot be compromised. Hence, while the Commission expects the local bodies to increase energy efficiency in street-lighting, it is not inclined to increase its tariff to match the ACoS at present.

**6.13 Rationalisation of ToD rebate for night off-peak consumption**

***MSEDCL's submission***

- 6.13.1 MSEDCL has submitted that the objective of increasing the ToD Rebate, as approved in Case No. 19 of 2012, from 100 paise/kWh to 250 paise/kWh on shifting of day consumption to night has not been achieved as envisaged. Demand during the day or night is nearly similar and the load curve is almost flattened.

Therefore, this additional benefit is being enjoyed by a few consumers, and its burden is spread on the others. Instead of only a few consumers operating 24x7 are getting the advantage of higher ToD rebate, the benefit of ToD must be uniformly available without discrimination to eligible consumers operating in shifts.

- 6.13.2 In its additional submission after the Public Hearings, MSEDCL submitted that it has examined the suggestion of the consumers with regard to changes in the ToD Rebate time-slots, and has proposed changes as under:

**Table 119: ToD Time Slots and Discount/Penalty, as proposed by MSEDCL**

<b>Time Slots</b>	<b>Proposed (Discount/ Penalty) Paise/kWh</b>
0800 hours to 1200 hours	80
1200 hours to 1800 hours	0
1800 hours to 2000 hours	110
2000 hours to 0800 hours	(150)

- 6.13.3 Considering the time required to change the programming of ToD meters, MSEDCL requested that the revised ToD time slots may be made applicable from 30 September, 2015.
- 6.13.4 MSEDCL submitted that the expected benefit from the change in ToD time slots and reduction in ToD rebate will ultimately pass on to the Industrial category by reduction in base Energy Charges. This reduction will benefit all industrial consumers, whereas the higher ToD rebate benefited only select industries working at night.

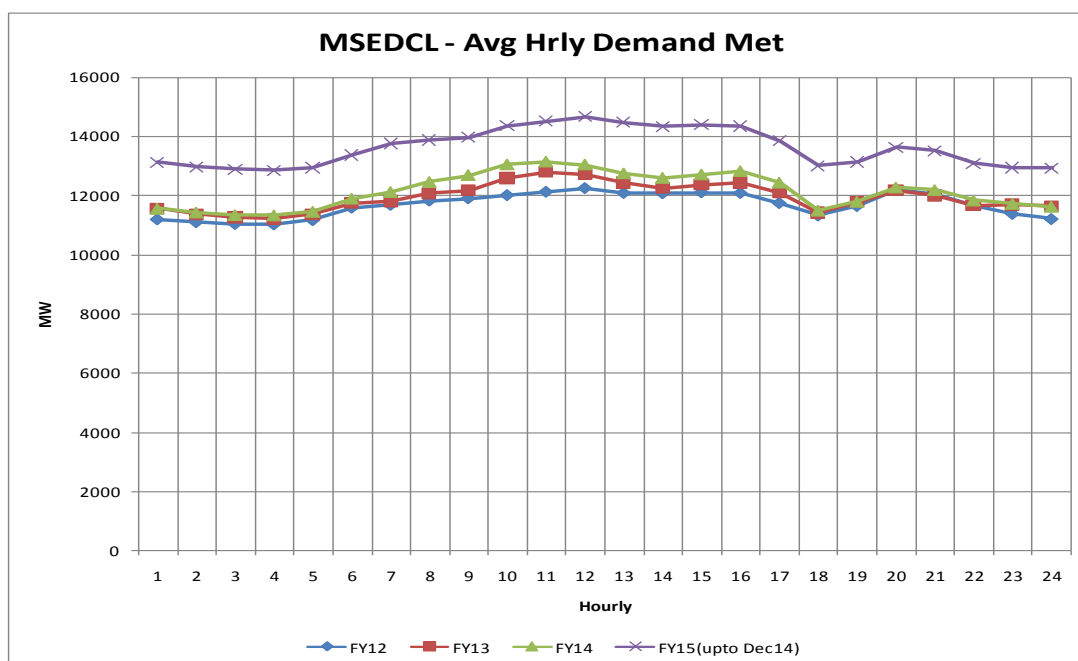
***Commission's Ruling***

- 6.13.5 While approving the initial increase in ToD rebate during off-peak hours in the last Tariff Order, the Commission observed that ToD tariff design is expected to facilitate the desired shift in the load curve and incentivizes consumers for the purpose. However, it is necessary to review whether the increase in rebate has served its intended purpose.
- 6.13.6 Vide its Order dated 26 December, 2012, the Commission increased the ToD rebate for off-peak consumption (i.e. 2200 hours to 0600 hours) from 100 paise/kWh to 250 paise/kWh, on a trial basis for 3 months starting from January, 2013. MSEDCL was directed to approach the Commission for its extension, detailing the CBA of the of revised ToD rebate.
- 6.13.7 The applicability of that ToD rebate was subsequently extended through Orders dated 2 April, 2013 and 7 October, 2013. In the latter Order, the Commission observed that

*'as far as precise cost benefit analysis report is concerned, the Commission agrees with the MSEDCL submission that such precise analysis requires data for longer*

*duration. The Commission is of the view that MSEDCL should submit the detailed cost benefit analysis of the increased ToD rebate of the off-peak consumption at the time of filing the next Tariff Petition. The Commission is of the view that such data may be helpful to Utility as well the Commission in future for tariff rationalisation.'*

- 6.13.8 In the present MYT Petition, MSEDCL has submitted that the increased ToD rebate has not led to further shifting of load, and the share of night consumption has remained constant (~ 28% to 29%). Hence, MSEDCL has proposed a reformulation of the present ToD rebate structure during off-peak hours. As the intended objective of the higher ToD rebate at night hours has not been achieved, the Commission has accepted MSEDCL's proposal to reduce ToD rebate during off-peak hours (i.e. 22:00 hours to 06:00 hours) from 250 paise per unit to Paise 150 per unit.
- 6.13.9 At the same time, the reduction in the ToD rebate has been utilised to also reduce the Energy Charges of consumer categories to whom the ToD tariff is available.
- 6.13.10 As regards the suggestion to revise the ToD time-slots, the Commission has analysed the hourly load curve for the past period (from FY 2011-12 to FY 2014-15 (up to Dec-14)), which is presented below:



- 6.13.11 As per the revision in ToD time-slots proposed by MSEDCL in its additional submission, off-peak hours (night) would extend to 12 hours (as against the existing 8 hours), whereas evening peak hours would reduce to 2 hours (as against the existing 4 hours). Further, an increase of 4 hours has been proposed in the morning peak (as against the existing 3 hours). Such revision in time-slots would require careful examination and analysis of daily/monthly load curves, impact of seasonal variations on the load curve and the revenue impacts on MSEDCL and on consumer bills. Besides, implementation aspects of change in configuration for ToD

meters and billing software will also have to be taken into consideration. The Commission has approved revision in ToD rates during off-peak hours (night), the impact of which would need to be evaluated. MSEDCL should study these aspects and submit its analysis along with any future proposal for revision in time-slots.

#### **6.14 Rationalisation of Power Factor Incentives**

##### ***MSEDCL's submission***

- 6.14.1 MSEDCL has submitted that, due to sufficient power availability, almost 85% of the Feeders in the State are free from load shedding, Further, with the increased consumer awareness about grid stability and with Power Factor improvement measures, the State Grid is fairly stable. Accordingly, MSEDCL has proposed to revise the PF incentive to 5% for Unity PF from the present 7%. However, it has proposed to retain the PF penalty as currently applicable.

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

- 6.14.2 MSEDCL's reasoning for revising the PF incentive in view of improved power supply position in the State is not sound. The Power Factor and reactive power compensation requirement of the grid and the retail supply has a direct bearing on the overall voltage profile and loss level of the system. Also, the Power Factor of the consumer load has a bearing on the reactive energy requirement of the distribution system. Hence, improvement in the Power Factor is in the interest of the consumer as well as the Utility. With the prevalent PF incentive and penalty mechanism, many industrial consumers have made significant investments in the capacitor/reactive compensation equipment to avail of incentive and to improve the Power Factor. The Commission is of the view that it would not be proper to change the PF incentive/penalty structure at this stage.
- 6.14.3 The Commission directs MSEDCL to study selected cases of PF (lead/lag) incentive/penalty along with their voltage profiles, and explore the possibility of implementing kVAh metering for selected categories. MSEDCL should submit its study report along with case scenarios with its next Petition for Tariff determination.

#### **6.15 Passing on NCE Cost to Polluting Industries**

##### ***MSEDCL's submission***

- 6.15.1 MSEDCL has submitted that, while the promotion of NCE is a national mission, it is not appropriate to achieve it at the cost of common consumers. The tariff determined by the Commission is very high for RE sources. It has a direct impact on ARR, which affects the overall tariff and ultimately the tariff of low-end common consumers.
- 6.15.2 The emission of greenhouse gases such as CO<sub>2</sub>, methane, etc. are mainly generated by energy-intensive industries, manufacturing industries, transport and some

industrial processes. Therefore, MSEDCL instead of making it obligatory for Distribution Licensees to purchase a certain quantum of RE, it should be obligatory for such industries to contribute towards development of green power.

- 6.15.3 MSEDCL has submitted that, as a Distribution Licensee, it is ready to purchase the RE power to meet the RPO target, but the cost of RE power should be passed on to entities which are predominantly responsible for generation of greenhouse gases, pollution and climate change.

***Commission's Ruling***

- 6.15.4 In pursuance of the provisions of Sections 86(1)(e) and 61 (h) of EA, 2003, the Commission has formulated RE Tariff Regulations and RPO Regulations for promotion of the RE in the State. Accordingly, the Commission also determines the preferential tariff for RE sources from time to time. The cost of procurement of RE by the Distribution Licensee is passed on through the ARR after due regulatory scrutiny. Hence, there is no need for separate provisioning for passing of such costs. Accordingly, the Commission rejects the proposal of MSEDCL to pass on NCE related costs through tariff to polluting industries.

**6.16 Inter-State Tariff**

***MSEDCL's submission***

- 6.16.1 MSEDCL has submitted that, considering the prevailing circumstances and in pursuance of Section 27 of the Indian Electricity Act, 1910 (now repealed), the erstwhile MSEB was supplying power to consumers from neighboring States situated in villages adjacent to the Maharashtra border. A separate tariff of Rs. 2.60 per unit was applicable for such supply. Such Inter-State tariff was in force up to September, 2006, and was discontinued from October, 2006.
- 6.16.2 Section 27 of the Indian Electricity Act, 1910 provided that the State Government can authorize any Licensee to supply power to any person outside the area of supply. However, in the EA, 2003, there are no specific provisions for such supply, and MSEDCL (the successor company of the erstwhile MSEB) may not be legally allowed to supply power to such consumers from neighboring States, i.e. outside its area of supply.
- 6.16.3 MSEDCL is also receiving power from other States, e.g. from Madhya Pradesh for supply to 42 villages situated in Amravati District. If this Inter-State power supply arrangement is discontinued, the other States will also terminate the present power supply arrangement for Inter-State supply from their end. In present circumstances, it is not feasible for MSEDCL to supply power to many consumers of situated near the border, and hence it is essential to receive power from neighboring States and to continue the present supply arrangement.

6.16.4 MSEDCL has proposed changes in the category of all such consumers from neighboring States situated in villages adjacent to the State border, and the following provisions for such Inter-State Supply.

- Individual Consumers: For individual consumers, prevailing MERC Tariff based on the type of the usage
- Bulk Supply (Single Point Supply) and further distribution: For Bulk supply at single point and further distribution to various consumers, the tariff applicable may be determined by the Commission. However, in such cases necessary agreement with the concerned would be executed as per the relevant terms and conditions.
- Exchange with other States: In case there is an exchange of power between the two States, then such billing may be done by netting off the energy, and the balance energy may be billed as per the mutually agreed rate.

***Commission's Ruling***

6.16.5 Some of the relevant provisions of the EA, 2003 are as follows:

- a) Section 43 of Electricity Act, 2003 sets out the duty of the Licensee to supply electricity. It stipulates that *“Every distribution licensee, shall on an application by the owner or occupier of any premises, give supply of electricity to such premises, within one month after receipt of the application requiring such supply.”*
- b) Section 2 provides the following definitions:
  - (3) *“area of supply” means the area within which a distribution licensee is authorised by his licence to supply electricity.*
  - (38) *“Licence” means a licence granted under section 14.*
  - (39) *“Licensee” means a person who has been granted a licence under section 14.*
  - (15) *“consumer” means any person who is supplied with electricity for his own use by the licensee....*
  - (17) *“distribution licensee” means a licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;*
- c) As per section 12,
 

*“No person shall-*

  - i) Transmit electricity: or*
  - ii) Distribute electricity: or*
  - iii) Undertake trading in electricity.*

*Unless he is authorised to do so by a licence issued under section 14 or is exempt under section 13.”*

d) Section 13 stipulates the power to exempt:

*“The Appropriate Commission may, on the recommendations of the Appropriate Government, in accordance with the national policy formulated under section 5 and in the public interest direct, by notification that subject to such conditions and restrictions, if any, and for such period or periods, as may be specified in the notification, the provisions of section 12 shall not apply to any local authority, Panchayat Institution, users’ association, co-operative societies, non-government organizations, or Franchisees.”*

e) Section 14 refers to grant of Licence:

*“The Appropriate Commission may, on an application made to it under section 15, grant a licence to any person-*

- i) To transmit electricity as a transmission licence; or*
- ii) To distribute electricity as a distribution licence; or*
- iii) To undertake trading in electricity as an electricity trader, in any area as may be specified in the licence.”...*

6.16.6 Thus, while the Commission notes the historical background for the present arrangements, the provisions of the EA, 2003 do not envisage that a Distribution Licensee can continue to supply electricity to consumers outside its Licence area.

6.16.7 However, the Commission also recognizes the practical difficulties of terminating the present arrangement without having alternative arrangements in place, and that it may take some time to arrive at a final solution. MSEDCL should interact with its counterparts in other States and work with them with a view to ultimately transferring such consumers to and from the respective Distribution Licensees. However, till such inter-Licensee transfer of consumers take place, the status-quo may be maintained by MSEDCL. Based on the outcome of its discussions with the other Distribution Licensees, MSEDCL may approach the Commission in a separate Petition with its proposal for dealing with this situation.

## **6.17 Creation of HT Bulk Supply (Residential) Category**

### ***MSEDCL’s submission***

6.17.1 MSEDCL has proposed to do away with categorisation as HT Bulk Supply. As per the Commission’s earlier directions, the Commercial category consumers requiring a single point supply will have to either operate through the Distribution Franchisee route or take individual connections under the relevant tariff category. MSEDCL has further proposed to introduce the HT Residential category for consumers who have taken power supply on High Tension for residential purpose. This said category would also be applicable to consumers taking supply at HT voltages at a single point for consumption within HT Residential Complexes, viz., Group Housing Societies, residential colonies of industrial consumers and educational institutions, Government and private residential housing colonies,



Government and Private Mixed ( Residential + Commercial) Housing Colonies and Commercial Complexes. The tariff for such consumers has been designed in such a way that it is around 120% of the ACoS.

***Commission's Ruling***

- 6.17.2 The Commission has accepted the proposal of MSEDCL for creation of a HT Bulk Supply (Residential) Category. Its coverage and tariff-related details have been provided in the Tariff Schedule.

**6.18 Separate Category for Government Schools and Hospitals**

**MSEDCL's submission**

- 6.18.1 Citing the ATE Judgment dated May 30, 2014, under which a distinction can validly be made between private and public institutions for tariff treatment, has proposed to introduce a separate consumer category consisting of Government owned, managed and operated educational institutions (viz. Zilla Parishad/ Municipal Council or Corporation Schools, Govt. Medical/Engineering Colleges, etc.) but excluding Government-aided educational institutions. Similarly, this category would include Government owned, managed and operated hospitals (viz. District Civil Hospitals, Primary Health Centres, etc.). MSEDCL has further proposed that the tariffs for such consumers may be equal to the ACoS.

***Commission's Ruling***

- 6.18.2 The Commission believes that there is merit in having separate consumer category consisting of all Government Educational Institutions and Hospitals, as these are public institutions serving the society at large, often free of charge or at a nominal fee. Accordingly, considering the ATE Judgment, the Commission has further divided the Public Service category into two sub-categories, viz. (A) Government Educational Institutions, Hospitals & Primary Health Centers and (B) Other Public Services. The scope of coverage and tariff-related details has been covered in the Tariff Schedule.

**6.19 Stand-by Charges for Captive Power Plants**

***MSEDCL's submission***

- 6.19.1 MSEDCL has submitted that providing stand-by power to CPPs is a matter of contract between the two parties. MSEDCL is not bound to provide stand-by support to CPP. However, in order to bring in uniformity, it has proposed the following changes in the provision for levy of stand-by charges for CPPs (both embedded and non-embedded):

*'HT Industrial consumers having captive generation facilities synchronized with the grid will pay additional demand charges of Rs. 20 per kVA per month only for the*

*sanctioned standby contract demand component, and in the case when the recorded demand exceeds the contract demand then normal demand charges will also be applicable for the recorded demand (CD) upto the standby demand component. Beyond the total demand (CD + Standby Demand) penalty for exceeding CD will be applicable.'*

6.19.2 MSEDCL has submitted that, whenever the stand-by demand is used by CPP holders, they be required to pay stand-by demand charges of Rs. 20 per kVA per month over and above the Demand Charges for the exceeded component over contracted demand. MSEDCL has proposed the following additional conditions for providing stand-by power to CPP consumers:

- The stand-by demand shall be provided for a maximum period of 30 days only once in a year;
- The Project Holder shall apply for stand-by supply one month in advance;
- The stand-by demand shall be utilized only during outages and shutdown of the Generator;
- In case stand-by demand is used for other than the purposes mentioned above, it shall be charged as per the Temporary tariff approved by the Commission.

6.19.3 MSEDCL has submitted that, being a tariff-related issue, MSEDCL has taken up the issue of stand-by charges in the present Petition. Other policy related matters would be dealt with independently through a separate Petition. MSEDCL also clarified that this submission is without prejudice to its rights and contentions in that Petition, and that it reserves its right to again approach the Commission depending upon the final decision.

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

6.19.4 The issue of stand-by power supply to CPP users is a matter under the Commission's regulatory jurisdiction and is to be governed as per the regulatory framework and directions of the Commission from time to time. The Commission is of the considered opinion that, in a comfortable power supply situation, there is no need to apply any additional restrictions or conditions on CPPs. As a Licensee, MSEDCL is required and should supply power to its consumers on demand. The Commission is of the view that the present provisions for stand-by power supply to CPPs are well balanced, and sufficiently protect the legitimate interests of both CPP consumers as well as MSEDCL. Thus, the Commission has decided to continue with the existing dispensation for stand-by charges, without any modification.

### **6.20 Billing Demand during Off-Peak Period**

#### ***MSEDCL's submission***

6.20.1 Under present provisions, the demand recorded by a HT consumer during night hours is ignored for billing purposes, even if it exceeds the consumer's Contract Demand. A consumer who has exceeded his Contract Demand during night hours

is considered as eligible for Load Factor Incentive. MSEDCL has observed that consumers are taking undue advantage of this provision, and are benefited by paying a marginal penalty for exceeding Contract Demand while enjoying a substantial Load Factor Incentive.

- 6.20.2 MSEDCL has submitted that HT industrial consumers attempt to take maximum advantage of the existing provision. If the present provision of “Billing Demand” is continued as it is, a HT industrial consumer may be tempted to purposely exceed his Contract Demand during night hours to ensure maximum consumption during these hours, and would benefit from Load Factor Incentive also.
- 6.20.3 Due to such actions by consumers, there is a risk to grid security which may require use of additional protective devices by MSEDCL to protect the grid from failure. This may result in line tripping and unwarranted load shedding, which is not beneficial for the system as well as consumers. Further, there may be a CT saturation problem due to continuous overloading.
- 6.20.4 In order to maintain grid discipline and avoid such benefit enjoyed by a few consumers, the Commission may consider modifying the present provision in respect of “Billing Demand”, and the Demand recorded during off peak hours may be considered for billing purposes. Similarly, such consumers as have exceeded Contract Demand during night hours may not be considered eligible for Load Factor Incentive.

***Commission’s Ruling***

- 6.20.5 In the context of Billing Demand and demand recorded during ‘off-peak’ hours, the Commission observes that the concept of off-peak rebate is to utilise the idle capacity available in the off-peak period due to lower demand from residential and commercial consumers. It is in the Licensee’s interest that industrial consumers utilise its available, already contracted capacity which is not being otherwise used. Therefore, the Commission finds it reasonable that such optimum utilisation of capacity by exceeding the Contract Demand is not billed in terms of additional Fixed Charges. Hence, the current definition of Billing Demand is retained in this Order.

**6.21 Increase in Load level for release of connections as per SoP Regulations, 2014**

***MSEDCL’s submission***

- 6.21.1 MSEDCL has introduced levy of voltage surcharge on consumers who have been sanctioned load extension/new connections after August, 2006, with the consent of the applicants. However, the Commission has issued the MERC (Standard of Performance of Distribution Licensees, Period of Giving Supply and Determination of Compensation) Regulations, 2014 (‘SoP Regulations’) and the load levels have been revised. MSEDCL has been releasing connections wherever possible as per these Regulations.

- 6.21.2 However, considering the increased load levels and available infrastructure, MSEDCL may face constraints in releasing connections at higher load as prescribed in the SoP Regulations. Due to release of connections at revised load levels, the system Distribution Loss may increase by 0.1% to 0.2%, which translates into ~Rs. 50 Crore to Rs. 100 Crore per year, and this Distribution Loss may become embedded permanently in the system. This would financially burden the common consumers.
- 6.21.3 In order to avoid such financial burden on common consumers, MSEDCL has requested that it be allowed to charge 2% Voltage Surcharge to consumers released on voltage lower than the norms prescribed under the Regulations. The Commission may also consider the impact of these provisions while deciding the Distribution Loss reduction trajectory.

***Commission's Ruling***

- 6.21.4 In previous tariff Orders, the Commission has allowed MSEDCL to levy 2% voltage surcharge from consumers who opt for electricity connections below the voltage level specified in the earlier SoP Regulations, 2005.
- 6.21.5 MERC has notified the SoP Regulations, 2014 in May, 2014. The proviso to Regulation 5.3 stipulates the following:
- “Provided further, the licensee may release electricity supply at the voltage lower than the specified above only under exceptional circumstances by charging voltage surcharge determined by the Commission from time to time. The distribution licensee shall ensure that the supply is provided at the specified voltage within a period of one year.”*
- 6.21.6 The SoP Regulations, 2014 have increased the load levels for releasing connections on a particular voltage. Under such circumstances, the requirement of releasing connections below the voltage level specified in the Regulations needs to be established. Therefore, MSEDCL may file a separate Petition on this issue with details of such consumers and justification for levying voltage surcharge. In the meantime, MSEDCL should stop levying voltage surcharge.

**6.22 ToD Rebate to Captive Solar Generators**

***MSEDCL's submission***

- 6.22.1 Many captive Solar Generators are approaching MSEDCL for connectivity to their Solar PV projects at their internal bus at 33 kV level or below in their premises. MSEDCL has been granting such connectivity subject to various conditions.
- 6.22.2 The incentives/rebate benefits are only for full-fledged consumers of MSEDCL and not for partial OA consumers. Some consumers, through their captive Solar plants, are cherry picking and taking double benefits at the expense of common consumers. MSEDCL has sought that no benefits be extended to partial or full OA consumers, in order to protect the interests of its common consumers.

- 6.22.3 A very high rebate in night tariff will considerably increase the Energy Charges during other times of the day, and will also adversely affect other categories of consumers who are not eligible for the ToD tariff. Therefore, for ToD night rebate calculation, the ToD – A Zone Units less daily Solar generation units should be considered. MSEDCL requested the Commission to approve the ToD rebate for Captive Solar Generators accordingly.
- 6.22.4 The final decision of the High Court in the pending matter (Writ Petition No. 6670 of 2014) would be binding on MSEDCL. Its current submission is without prejudice to its rights and contentions in that matter, and MSEDCL reserves its right to again approach the appropriate authorities depending upon the High Court's final decision.

***Commission's Ruling***

- 6.22.5 In the past, the Commission has allowed adjustment of energy credit in case of RE generation on ToD slot basis against the energy consumption in the respective ToD slots. Even the energy exchange between the Distribution Licensees is undertaken on time-block basis against the respective time-blocks. Under these circumstances, reduction of ToD rebate during night off-peak hours for Solar power generated during the day is not proper and hence rejected.
- 6.22.6 With the advancements in Solar power technology and economies of scale driving down the cost of Solar installations, and in view of the policy measures initiated by the Central Government to promote it, Solar power capacity addition is expected to increase in the State. The Commission has already initiated the regulatory process for formulation of Net Metering Regulations for Rooftop Solar power in Maharashtra, which is at an advanced stage. In addition, there are several other regulatory aspects associated with Solar power development, such as charges for captive/OA wheeling, connectivity standards for distributed Solar generation, interconnectivity agreements, etc, which will have to be dealt with comprehensively. Accordingly, MSEDCL may file a separate Petition for dealing with the regulatory aspects associated with Solar power wheeling transactions. However, until such comprehensive framework for Solar power development is evolved, the practice of reducing ToD rebate during night off-peak hours by Solar power generated during the day should be stopped.

**6.23 Proposal for Schedule of Charges**

***MSEDCL's submission***

- 6.23.1 As per Regulation 18 of the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 ('Supply Code'), Distribution Licensees are required to file their Schedule of Charges along with applications for determination of tariff under Section 64 of the EA 2003. Accordingly, with its tariff Petition for FY 2012-13 (Case No. 19 of 2012), MSEDCL had filed its Schedule of Charges for various

activities, which the Commission had approved vide its Order dated 16 August, 2012.

- 6.23.2 The Schedule of Charges approved by the Commission is based on recent data and there has been no substantial rise in the cost elements. Therefore, MSEDCL submitted that it has decided not to propose a Schedule of Charges along with the present Petition. However, it may file a separate Petition seeking revision in the present Schedule as and when the need arises.

***Commission's Ruling***

- 6.23.3 The Commission has noted MSEDCL's submission. It may file a separate Petition in this regard when revision is sought.

**6.24 Tariff for Mobile Towers**

***MSEDCL's submission***

- 6.24.1 MSEDCL has submitted that, in the Tariff Order in Case No. 19 of 2012, Mobile Towers and Telephone Exchanges were included in the Commercial Category. As per the ATE Judgment dated 7 November, 2012 on the Appeal filed by some telecom companies, the relevant part of the Tariff Order was set aside and MSEDCL was directed to charge the Industrial tariff to Mobile Towers w.e.f. 1 August, 2012. ATE also ruled that MSEDCL may file a fresh Petition regarding the appropriate tariff category for Mobile Towers, and the Commission may consider it same and pass appropriate Order after hearing all the concerned parties.
- 6.24.2 In its MYT Petition, MSEDCL has now submitted that Mobile Towers are devices which are used for transmitting telecommunication signals, and there is no manufacturing or industrial activity. Accordingly, MSEDCL has proposed that the tariff for Mobile Towers should be as per the Commercial category only. MSEDCL has stated that it is purely a commercial activity and the Commission had correctly categorized it accordingly.
- 6.24.3 However, in its additional submission, subsequent to the Public Hearings, MSEDCL has proposed to include Mobile Towers in a newly created sub-category of Service Industries, under the main category of Industries, along with Telephone Exchanges, Telecom industries, IT/ITES Industries, Data Centres, etc.

***Commission's Ruling***

- 6.24.4 The Commission, in its Order in Case No. 116 of 2008 dated August 17, 2009, had discussed the categorisation of Mobile Towers in detail as follows:

*"As regards MSEDCL's proposal to classify certain telecom towers, etc., under commercial category, irrespective of whether they were covered under the IT & ITES Policy of the Government of Maharashtra, no rationale has been submitted by MSEDCL for this specific proposal. The Commission had consciously included IT and IT enabled Services (IT & ITES) under industrial category (HT and LT as applicable) in the Tariff Order for the erstwhile MSEB in 2004. Since then, the IT*

*& ITES category continues to be charged under industrial tariffs. In the existing Tariff Schedule of MSEDCL as well as the approved Tariff Schedule for the distribution licensees in Mumbai issued in June 2009, the Commission has included IT & ITES category under industrial category. Hence, the Commission does not agree with MSEDCL's proposal in this regard and rules that IT & ITES will be charged at industrial rates (HT and LT rates, as applicable), without getting into the details of whether mobile towers and commercial broadcasting towers and all other similar activities are covered under the Government of Maharashtra Policy on IT & ITES."*

The Commission is of the view that the rationale and ruling of its earlier Order in Case No. 116 of 2008 should continue to apply. In other words, the Industrial tariff will apply to Mobile Towers or other activities cited by MSEDCL only if they are covered as IT/ ITES and the provisions of GoM's Policy apply to them.

## **6.25 Tariff for Charging of Hybrid Vehicles**

### ***MSEDCL's submission***

- 6.25.1 Some of the automotive solution providers have approached MSEDCL to clarify in that electrical charging of batteries of hybrid vehicles in i) Residential premises ii) Commercial, Office premises iii) Industrial premises, as the case may be, through the existing electrical connections at these sites is permissible at the respective tariffs, so as to avoid any misunderstanding or hardship to consumers who intend to use such hybrid vehicles in the near future.
- 6.25.2 There is no provision in the existing Tariff Order for charging the batteries utilized for hybrid electric vehicles (2/4 Wheelers) through existing LT / HT Connections. Therefore, the commercial outlets charging Hybrid vehicles may be charged as per the Commercial tariff, and individuals charging the Hybrid Vehicles at residential, commercial or industrial premises may be charged as per the parent category of their usage.

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

- 6.25.3 The Commission accepts the proposal of MSEDCL, and has accordingly reflected it in the Tariff Schedule of this Order.

## **6.26 Load Factor Incentives**

### ***MSEDCL's submission***

- 6.26.1 In order to incentivize HT consumers, the Commission had introduced the Load Factor Incentive in the Tariff Order dated 10 March, 2003, stating as follows:

*"The MSEB faces a threat from movement of consumers having very high consumption to captive generation, under the provisions of the Electricity Act, 2003 (EA, 2003). In order to incentivize such high consumption consumers who also contribute a steady load to the MSEB system, the Commission has introduced a Load factor incentive."*

- 6.26.2 When the Load Factor Incentive was introduced, there was a huge demand/supply gap and load shedding was inevitable. Weekly staggering days and planned load shedding was implemented to maintain system stability. The average non-supply hours were more than 60 hours a month. Hence, while deriving the Load Factor Incentive formula, the consideration that interruption/non-supply to the extent of 60 hours in a 30 day month had been built in the scheme may have been considered by the Commission.
- 6.26.3 The load shedding to industries on staggering day has been withdrawn w.e.f. February, 2012. Load shedding for A, B, C, D, DCL group Feeders has also has been withdrawn. 24x7 supply is now available to industrial consumers. However, the formula which was introduced considering the supply constraint at that time is still in force. Since 60 hours interruption/non supply was in-built in the scheme formulated by the Commission, the consumer attaining Load Factor above 92% is eligible for the maximum 15% Load Factor Incentive. In view of 24x7 supply, is more and more consumers are maintaining Load Factor above 92% and thus availing the Incentive.
- 6.26.4 The non-supply criterion in the Load Factor Incentive formula cited above needs to be modified as follows so that the maximum Load Factor Incentive, i.e. 15% , is given only on 100% Load Factor considering the present supply scenario:  
*“All interruption/non-supply in a 30 day month is to be deducted from total hours in the month.”*
- 6.26.5 With the proposed criterion, the eligibility for Load Factor Incentive will have to be revised as follows:  
*“Consumers having load factor over 82% upto 92% will be entitled to a rebate of 0.75% on the energy charges for every percentage point increase in load factor from 82% to 92%. Consumers having a load factor over 92 % will be entitled to rebate of 1% on the energy charges for every percentage point increase in load factor from 92%.”*
- 6.26.6 The total rebate under this head will be subject to a ceiling of 15% of the Energy Charges for that consumer. MSEDCL has requested the Commission to approve the proposed change in the Load Factor Incentive as above.

***Commission’s Ruling***

- 6.26.7 With the changes approved in the retail tariff design, including ToD rebate, the impact on Load Factor Incentive need to be assessed separately. The Commission directs MSEDCL to submit data on Load Factor during different ToD time-slots, viz. 0600 hours to 2200 hours, and 2200 hours to 0600 hours, and the Load Factor Incentive availed by the consumers. The Commission may consider the issue in future after examining the data submitted by MSEDCL. Considering these aspects, the Commission is keeping the definition of Load Factor Incentive unchanged in this Order.



## **6.27 Supply to Other Licensees**

### ***MSEDCL's submission***

- 6.27.1 The Demand Charges for the demand component sought by MSEDCL for supply to other Licensees may be Rs. 600 per kVA per month. The Energy Charges for stand-by power will be billed on block-wise frequency base UI rate or MSEDCL Marginal Price (including IEX), whichever is higher. Over-drawal units (i.e. actual units drawn by the deemed Distribution Licensee minus [units scheduled by the Generator of the deemed Distribution Licensee plus units scheduled by MSEDCL against stand-by supply]) will be charged as per the SMP/ UI charges or Temporary tariff of MSEDCL, whichever is higher.
- 6.27.2 Considering the social obligations of Government organizations, MSEDCL submits that, in case of the SEZs owned/managed/controlled by GoM, the electricity supply may be as per mutually agreed terms and conditions.

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

- 6.27.3 The Commission notes that the Distribution Business of SEZs as deemed Distribution Licensees is to be regulated by the Commission, and they require to seek approval for their Special Conditions of Licence to operationalize their distribution activities. Thus, SEZs may choose to arrange for their own power sourcing requirements with due regulatory approval after notification of their Special Conditions of Licence. The energy exchange by such SEZs with other Utilities will have to be governed as per the balancing and settlement mechanism approved from time to time. However, such deemed Distribution Licensees (SEZs) will have to be members of the State Imbalance Pool, subject to the conditions governing such State Pool participation.
- 6.27.4 Further, some SEZs may choose not to undertake deemed Licensee operations, and may wish to source power from MSEDCL or other concerned Distribution Licensees on a single-point basis. However, the Commission is of the view that supply under such arrangement will have to be dealt with as Franchisee operations.
- 6.27.5 Accordingly, power supply to SEZs shall be governed as per the conditions outlined above, depending on the option that they choose to exercise for their deemed Licensee operations. Hence, the Commission has rejected MSEDCL's request to determine a tariff for bulk supply arrangements and stand-by power supply for SEZs.

## **6.28 Tariff for small businesses operated from residences**

### ***MSEDCL's submission***

- 6.28.1 In its Tariff Order, the Commission had opined that consumers who consume less than 300 units a month need not be subject to different tariffs. Accordingly, the Commission decided that the categories of consumers who consume less than 300

units a month would be applied the tariff of LT-I (Residential). The Commission further ruled that all consumers under LT-II (Non-Residential or Commercial), LT-V (LT Industry) and LT-X (Public services) who consume less than 300 units a month, and who have consumed less than 3600 units per annum in the previous financial year would be applied the tariff of LT-I (Residential).

- 6.28.2 MSEDCL proposes that the Non-Residential/Commercial, Industrial or Public Service Categories may not be extended this benefit since the basic objective of the proposal was to provide relief to small shop owners undertaking commercial activities from home. Moreover, this is against the basic principle of tariff design on the basis of the purpose of usage of electricity.

***Commission's Ruling***

- 6.28.3 In its Tariff Order in Case No. 19 of 2012, the Commission has provided the benefit of Residential tariff to small businesses running from the residence and consuming less than 300 units a month. The relevant para under LT-1: LT-Residential category of the Tariff Schedule reads as under:

*"This category is also applicable for all consumers under LT-II (Non-residential or Commercial), LT-V (LT Industry) and LT-X (Public services) who consume less than 300 units a month, and who have consumed less than 3600 units per annum in the previous financial year. The applicability of this Tariff will have to be assessed at the end of each financial year. In case any consumer has consumed more than 3600 units in the previous financial year, then the consumer will henceforth not be eligible for Tariff under this category".*

- 6.28.4 Subsequently, in another Order in Case No. 118 of 2012 dated 16 July, 2013, the Commission clarified that:

*"With above, the Commission directs MSEDCL to allow the benefit of LT-Residential tariff to the consumers operating small business or any activity which technically may be classified as commercial / industrial / non-residential from part of their residence, irrespective of such consumers are situated in rural or urban area, subject to the condition of monthly / yearly consumption as specified in tariff Schedule in Order dated 16 August, 2012. Such tariff should be made applicable from date of applicability of Order i.e. 1 August 2012 and MSEDCL should refund the excess recovered amount, if any to the consumers. MSEDCL should modify their Circulars to give effect to this ruling of the Commission."*

- 6.28.5 The Commission, for the purpose of removing any ambiguity in this regard, has included the above clarification in the Tariff Schedule of this Order.

**6.29 Retrospective CSS for FY 2014-15**

***MSEDCL's submission***

- 6.29.1 MSEDCL has submitted that as and when it is determined by the Commission, CSS is generally made applicable prospectively. Vide its Order in Case No. 38 of 2014, the Commission allowed certain charges which resulted in an increase in

tariff of consumers during FY 2014-15. Therefore, the need to re-determine the CSS arose due to the change in ABR, i.e. the “T” component of the CSS formula.

6.29.2 Further, the Commission in its Order dated 11th June in Case No. 38 of 2014 ruled that

*“As directed by the Commission, MSEDCL is required to file its MYT Petition for FY 2013-14 to FY 2015-16. After the filing of MYT Petition, the Commission will determine the tariff for FY 2014-15 to FY 2015-16. Therefore, the Commission is of the opinion that it will be appropriate for MSEDCL to file its application for redetermination of cross subsidy surcharge for FY 2014-15 along with its MYT Petition.”*

6.29.3 Accordingly, MSEDCL submitted its proposal for re-determination of CSS in Case No. 169 of 2014. The CSS sought, as above, was to be made applicable for those OA consumers who were availing OA during FY 2014-15. However, the same issue of CSS levy was also considered in MSEDCL’s MYT Petition. Hence, MSEDCL withdrew the Petition with liberty to file additional submissions in the ongoing proceedings of the MYT Petition.

6.29.4 As stipulated in the OA Regulations, the CSS is to be based on the formula given in the Tariff Policy. Accordingly, the consumers who opted for OA in FY 2014-15 need to be charged for the compensation of level of cross-subsidy which prevailed in FY 2014-15 by virtue of the Commission’s Order in Case No. 38 of 2014 so as to avoid the burden on other consumers.

6.29.5 Therefore, MSEDCL has sought approval of the CSS for FY 2014-15 and its applicability from 1 April, 2014. MSEDCL has calculated the CSS and Wheeling Charges as per the methodology approved by the Commission in past Tariff Orders. The CSS for the respective periods is to be paid by the OA consumers availing OA in those periods so that the current level of cross-subsidy is maintained by the respective consumers.

6.29.6 If retrospective application is not permitted, OA consumers will be unduly benefited, and the burden will be wrongly loaded on the ARR, which will have a tariff impact on other consumers of MSEDCL.

***Commission’s Ruling***

6.29.7 The Commission notes that tariff rates and charges determined and approved by the Commission have been made effective with prospective effect. Determination of the Tariff rates and charges with retrospective effect not only affects the consumer and utility but also creates regulatory uncertainty for the transactions already effected in the past and hence is unfair from utility as well as consumer perspective.

6.29.8 Further, the Commission, in this Order is determining the tariff for FY 2015-16 as petitioned by MSEDCL, duly giving impact of all the past gaps/surplus, additional claims upto FY 2015-16, which also includes impacts related to ARR

determination for FY 2014-15. The new retail tariff for the categories of consumers shall also be made applicable with prospective effect only. Therefore, the Commission is of the view that the question of redetermination of CSS for the OA transactions retrospectively, for the FY 2014-15 does not arise.

### **6.30 Separate Category for 1 MW and above consumers**

#### ***MSEDCL's submission***

- 6.30.1 MSEDCL submitted that the Commission has already addressed the issues relating to consumers with Contract Demand of 1 MW and above in Case No. 50 of 2012. The Commission has the powers to decide the tariff categories.

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

- 6.30.2 In its Order dated 2 January 2013 in Case No. 50 of 2012, the Commission has addressed the issues relating to tariff determination for consumers with Contract Demand of 1 MW and above. The Commission had observed that the option of OA provided under Section 42 is an enabling provision and should not be interpreted to mean that all such consumers must necessarily avail OA. Therefore, the Commission is of the view that, while determining the Tariff, it is not appropriate to discriminate between consumers based on their eligibility for availing OA.
- 6.30.3 Consumers with Contract Demand above 1 MW are eligible to avail OA. The level of Wheeling Charges and CSS has a bearing on the OA transactions. The Commission has elaborated the rationale and principles for determination of Wheeling Charges and CSS separately in this Order. All other categorization related changes made through this Order have been dealt with in the Tariff Schedule.

### **6.31 Categorisation of Cold Storage**

#### ***MSEDCL's submission***

- 6.31.1 MSEDCL has examined various issues arising from consumer litigations due to wrong categorization. Based on the feedback from interaction with field officers, MSEDCL has proposed applicability of Tariff to different categories of consumers in an exhaustive manner.
- 6.31.2 In order to avoid ambiguity in the minds of consumers as well as its field officers, MSEDCL has differentiated the categorisation of cold storages based on the nature and purpose of supply. Accordingly, MSEDCL has proposed the following:
- Pre-cooling & cold storage for raw Agricultural Produce (Fruits/vegetables) - Agriculture Category
  - Cold storage Co-operative Society for storage of self produce, Food Processing including Fishing/Aquaculture - Industrial Category

- Cold storage for finished product, marketing purpose, or other purposes not specified in any other category - Commercial Category

***Commission's Ruling***

- 6.31.3 MSEDCL has proposed to apply tariff for cold storages under three different categories.
- 6.31.4 As mentioned earlier in this Order, the Commission recognizes that cold storages play an important role in various segments of economic activities for preserving the nutritional and economic value of various products and commodities such as agricultural produce (fruits/vegetables), dairy products, meat and fish products, pharmaceuticals and vaccines, horticultural products, beverages, etc. Cold storages are an important link in the chain for adding value and reducing the large wastage of agricultural and allied products by expanding the scope for storage and sale, with or without further processing, for local or export markets. However, by their very nature, cold storages are relatively power-intensive, and the cost of power is a significant factor in their viability. Moreover, for optimal utilization of their capacities, cold storages may have to cater to different commodities and applications at different times. Hence, creating multiple tariff categories for cold storages would not address the emerging requirements but also lead to implementation challenges. At the same time, cold storages are generally designed to cater to specific storage conditions and operating capacities considering their predominant usage pattern.
- 6.31.5 Considering the above, the Commission is of the view that treating the tariff applicable for agriculture pumpsets (which is a highly subsidised category with tariff far below ACOS) for cold storages would not be appropriate. At the same time, treating the same under commercial category (which is cross-subsidising category with tariff higher than ACOS) as proposed by MSEDCL would also not be prudent. Accordingly, the Commission has carefully considered above aspects and the submissions made by MSEDCL and various objectors/stakeholders and thus decided to treat cold storages under two distinct categories, namely:
- (a) Cold Storages for Agriculture products – processed or otherwise covered under the category Agriculture – Others (excluding agriculture pump sets); and
- (b) Cold Storages for all other purposes to be covered under Industrial Category.
- 6.31.6 The detailed scope of tariff applicability and associated terms and conditions for cold storages, along with the applicable tariffs, has been elaborated in Tariff Schedule of this Order.

**6.32 Categorisation of Bio-Technology Industries**

**MSEDCL's submission**

- 6.32.1 MSEDCL has submitted that it has no objection to providing Industrial tariff to BT Industries as long as bonafide industrial use is established.

***Commission's Ruling***

- 6.32.2 The Commission observes that the GoM Bio-Technology Policy, 2001 and subsequent Package Schemes of Incentives envisage that BT Units in Maharashtra are eligible for various incentives, which include exemption in Electricity Duty and provision of power at the Industrial tariff, subject to approval by the Commission. In line with this Policy of GoM, the Commission clarifies that BT Units are to be covered under respective the Industry category (HT or LT) depending upon the Supply voltage.

**6.33 Separate Category for Powerlooms**

***MSEDCL's submission***

- 6.33.1 MSEDCL submitted that there is a demand for creating a separate category for the Powerloom industry as a separate category under Industries, as in some other States. MSEDCL agrees with the suggestion made, and proposes that a separate category may be created as Cottage Industries, for Powerlooms and Flour Mills.

***Commission's Ruling***

- 6.33.2 As mentioned earlier in this Order, during the public consultation process, a number of suggestions have been made for treating Powerlooms as a separate category under Industries, as in some other States. The point was also made that, out of 24 lakh Powerlooms in India, nearly 8 lakh are in Maharashtra; and that they provide direct employment opportunities for about 10 lakh persons, and around 50 lakh persons are dependent on the Powerloom business. It is also a fact that, in the past, there was a separate tariff category for Powerlooms in Maharashtra. Further, Government of Maharashtra continues to provide subsidy for Powerlooms in the State. Consequently, the details of the number of consumers and the consumption information for Powerlooms are maintained separately and are readily available to ascertain the revenue impact of change in tariff or creation of Powerlooms as a separate category.
- 6.33.3 Considering all the aspects, including availability of separate data, differential treatment by GoM, the legacy of past categorisation, and the employment impact, the Commission has decided to re-create LT Industry - Powerloom [LT V (A)] as a separate sub-category under LT Industry (LT V), in respect of which the Energy Charges have been determined at different rates which are lower than the other sub-category of LT Industries – Others [LT V (B)].

**6.34 Separate Category for Metro**

***MSEDCL's submission***

- 6.34.1 MSEDCL has submitted that, considering the Traction purpose, it has categorized the Mono/Metro rail under HT-Railways category, based on the Commission's

recognition of Metro and Mono rail under that category in TPC-D's Tariff Order dated 12 September, 2010 in Case No. 98 of 2009.

- 6.34.2 In the case of TPC-D and R-Infra D (Distribution Licensees in Mumbai), the Commission has fixed different tariffs for Traction and Railway Workshops, and shops on the platforms/railway Stations, etc. However, MSEDCL submitted that, if all the activities carried out at Metro Stations as well as the Traction requirement purpose are connected at a single point, a single tariff may be provided. In case separate meters are available for uses other than Traction, such supply may be billed as per the category of the usage.

***Commission's Ruling***

- 6.34.3 The Commission notes the ongoing development of Metro rail services in Maharashtra as a means of mass public transportation. However, at this stage, the Commission is not inclined to place the Metro rail services at par with Railways in terms of tariff. The Commission is in the process of further understanding the powers requirement of Metro, and its tariff has for the time being been determined on a two-part basis at a rate marginally higher than the tariff applicable to Railways.
- 6.34.4 The Commission has decided to create a separate tariff category for Traction purpose for Metro and Mono Rail. The other activities necessary for the operation of Metro/ Mono Rail, including Stations and Yards, shall be covered under HT IX (B): Public Service – Others category.
- 6.34.5 In case all the activities carried out at Metro Stations as well as the requirement for Traction are connected at a single point, then the tariff for Metro rail will be applicable. However, if separate meters are available for usage other than Traction, such supply shall be billed as per the parent category of the usage.

**6.35 Category for Testing and R&D Labs**

***MSEDCL's submission***

- 6.35.1 MSEDCL has submitted that Service Industrial Tariff shall be applicable to the Research & Development (R&D) units situated in the same premises of an industry and taking supply from the same point. Regarding Testing Laboratories, MSEDCL has submitted that the laboratories which provide sample and/or finished industrial products testing services should also be billed as per the Service Industrial Category Tariff.
- 6.35.2 In its Order dated 7 April, 2015 in Writ Petition 5449 of 2014, the High Court had directed the Commission to treat Venkateshwara Hatcheries Ltd.'s representation in Case No. 57 of 2013 as a suggestion/objection in terms of the Public Notice in the present proceedings, and to allow it to participate in the Public Hearing at Pune. In Case No. 57 of 2013, Venkateshwara Hatcheries Ltd. had sought that R&D

Units in relation to Poultry breeding, Hatching and Poultry farming and allied activities, situated both inside and outside the premises of the hatcheries and poultries, be included in the tariff category HT-V (Agriculture). It had submitted that its Poultry Diagnostic Research Centre (PDRC), situated at Pune-Solapur Road, carries out activities related to research and disease diagnostic services for poultry breeders and poultry farmers all over India.

***Commission's Ruling***

- 6.35.3 The Commission is of the view that office premises or administrative building, or canteen facilities, or R&D or laboratory facilities, or any other such units situated within the same industrial premises are essentially catering to the requirement of the host industry. In order also to simplify energy metering and billing procedures, the Commission has decided to treat the power consumption of all such activities within the industrial premises on par with the power consumption for the core industrial activity for the purposes of application of tariff category. No distinction has been made in respect of R&D or other laboratory facilities or for any other administrative unit for the purpose of tariff applicability, so long as such unit is located within the same industrial premises.
- 6.35.4 However, this will not apply in case such administrative blocks, office premises, R&D laboratory are located outside the industrial premises and are fed through separate power supply connection. The Commission is of the view that the assessment of the nature and purpose of services and activities undertaken by each R&D and Testing facility situated outside the industrial premises and application of the tariff category accordingly based on such assessment is not practicable. Hence, the power consumption by office premises or administrative buildings or other establishments, outside the industrial premises are also treated under the Commercial category. Accordingly, the Commission has decided to continue with the existing provision without any change, i.e. the Industrial tariff will apply only to those administrative units, R&D units and Testing laboratories situated in the same premises as the parent industrial unit and taking power supply from the same point of supply. Those located outside the industrial premises will continue to be covered under the Commercial category.
- 6.35.5 The Commission has considered the submissions made by M/s. Venkateshwara Hatcheries Ltd., who also appeared and was heard at the Public Hearing at Pune.
- 6.35.6 For the reasons set out above, the Commission is of the view that all the utilities, administrative block units and R&D centre/testing laboratory located within the premises of the hatcheries/poultry would be covered under the parent category, i.e. the tariff applicable for hatcheries/poultry (HT-V Agriculture). Such units situated outside these premises will continue to be covered under the Commercial category.



**6.36 Water Supply to Industrial premises*****MSEDCL's submission***

- 6.36.1 It has been suggested that the water works/supply in small private industrial complexes or premises may be billed as per the PWW Category, as in case of water works in Maharashtra Industries Development Corporation (MIDC) Areas. In response, MSEDCL has submitted that water works or water supply schemes owned by private industrial complexes or premises which are being used for self-consumption by such complexes or premises may be billed as per the Industrial category. However, water supply schemes not owned by them should continue to be billed under the Commercial category.

***Commission's Ruling***

- 6.36.2 The Commission has earlier ruled in its Order in Case No. 19 of 2012, that such activity may have commercial motives if it is not completely under the ownership, operation and maintenance of a Government body or local authority. However, the Commission is also of the view that water supply exclusively for industrial purpose should not be covered under the Commercial category. Therefore, the Commission has decided that water works or water supply schemes for self-consumption by industrial complexes/premises of individual private industries shall be included in the Industrial tariff category.

**6.37 Re-categorisation of Industrial consumer category*****MSEDCL's submission***

- 6.37.1 On the suggestion to create activity-based categories instead of a general category of 'Industry', MSEDCL has submitted that re-categorisation of consumers based on different activities will result in a number of sub-categories and may be cumbersome. Therefore, MSEDCL has proposed to split the Industries category into three different sub-categories:
- 6.37.2 Service Industries: Industrial units providing industrial services such as: IT/ITES Industries, Telecom Industries / Telephone Exchanges/Mobile Towers (to be deleted from Commercial), R&D Units outside Industrial Premises (to be deleted from Commercial), Industrial Testing laboratories, Data Centers.
- 6.37.3 Cottage Industries: This sub-category would include: Powerlooms, including other allied activities like warping, doubling, twisting, etc, flour mills, Masala Mills, Saw Mills, Brick Bhatti and Jaggery Manufacturing unit.
- 6.37.4 Industries: Under this sub-category, Manufacturing and all other Industrial activities which were proposed in the MYT Petition under the Industrial category and are not specifically covered in the other two proposed sub-categories are included.

***Commission's Ruling***

- 6.37.5 The Commission has already effected a significant reduction in tariff for both HT and LT Industry. Further, for the reasons set out earlier in this Order, the Commission has decided to create a separate sub-category for Powerlooms under LT Industry (LT-V). The Commission is of the view that there is no requirement of further segregation of Industry into three sub-categories as proposed by MSEDCL in its additional submission after the Public Hearings.

**6.38 Re-categorisation of Aquaculture, Sericulture, Fisheries and Cattle Breeding Farms**

***MSEDCL's submission***

- 6.38.1 In its Tariff Order in Case No. 19 of 2012, the Commission had clarified that Aquaculture, Sericulture, Fisheries and Cattle Breeding Farms shall be included in the Commercial category, as the purpose of use of electricity for these activities are commercial in nature. However, in its additional submission after the Public Hearings, MSEDCL has suggested that these be brought under the Industries category – Service Industry.

***Commission's Ruling***

- 6.38.2 The Commission has received several representations during the public consultation process regarding the tariff for Fisheries and Aquaculture, with detailed elaboration of the activities undertaken by fisheries and integrated seafood processing units which entail integrated ice manufacturing, chilling, pre-processing, canning, cooking, breadding, freezing and integrated cold storage for preservation of frozen marine products/sea foods. These activities are power-intensive in nature and, considering the critical nature of the power requirement, some of the units receive power supply through express Feeders. The application of the Industrial tariff has been sought, instead of Commercial tariff as a presently applicable. Some from the Fisheries industry referred to the classification set out in GoM's GR dated 1 April, 2013 in respect of integrated food processing units wherein fish/seafood is used as raw material, and requested that it may be adopted as it would mean classification as per work process rather than on the basis of type of product or ownership structure.
- 6.38.3 On the other hand, representatives from the Aquaculture industry have argued that aquaculture farming is in the nature of farming activity, and hence sought application of the Agriculture tariff. In aquaculture, the power is required for running water pumps and aerators. There were no representations from the sericulture or cattle breeding industry.
- 6.38.4 The Commission is of the view that the above processes for fisheries and integrated sea-food processing entail mechanised activities for processing and treating raw natural produce to preserve or enhance its nutritional and/or economic value. These activities are akin to mechanised food processing or agro-processing industrial

activity as recognised by GoM in its GR of 1 April, 2013. The Commission notes that MSEDCL, in its additional submission, has also proposed to re-categorise these into the Industrial category.

- 6.38.5 In view of the above, the Commission has decided that, for the purpose of applicability of tariff, Fisheries and integrated sea-food processing Units shall be considered under the Industrial category (HT/LT, as the case may be). However, aquaculture, sericulture and cattle breeding farms shall be considered under the Metered Agriculture – Others category.

### **6.39 Key Considerations for Tariff Design**

- 6.39.1 In this Order, the Commission has reduced the cross-subsidy between consumer categories in FY 2015-16 as compared to the previous year. The Commission has determined the ARR to be recovered through the tariff of FY 2015-16 as Rs. 55,602 Crore. This translates to a decrease in tariffs by around 5.72% as compared to the tariff at the time of filing of the Petition (February, 2015), and a reduction of 2.44% as compared to the tariff at the beginning of FY 2015-16 (i.e. in April, 2015). The Commission has determined the tariffs in line with the Tariff Philosophy adopted by it in the past, and as per the provisions of law. The tariffs and categorisation have been determined so that the cross-subsidy is reduced to the extent possible without subjecting any consumer category to a tariff shock.

- 6.39.2 As enunciated in earlier Tariff Orders, while undertaking the rationalisation of tariff of different categories, the Commission has kept in view Section 62 (3) of the EA, 2003, which stipulates that:

*“The Appropriate Commission shall not, while determining the Tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer’s load factor, Power Factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.”*

- 6.39.3 In this background, the broad manner in which the different criteria on which differentiation among consumers may be based have been applied by the Commission is set out below:

- The ‘Load Factor’ and ‘Power Factor’ criteria have been applied to provide rebates and disincentives, such as Load Factor Incentive for load factor above certain specified levels, and Power Factor rebates and disincentives which are provided to consumers who maintain their Power Factor above certain levels;
- The consumer categories are broadly classified under High Tension and Low Tension categories, in accordance with the ‘voltage’ criterion;

- The ‘time of supply’ criterion has been applied to specify ToD tariffs, so that consumers are incentivised to shift their consumption to off-peak periods, while ensuring revenue balance and passing on the financial benefit from rebate reduction to all consumers across categories with ToD tariffs;
  - The ‘nature of supply’ criterion has been applied to specify differential tariffs for continuous (non-interruptible) and non-continuous supply (interruptible) supply. However, in the light of improved power availability, the Commission has reduced the gap between their tariffs with a view to remove the differential altogether depending on the extent of future improvement in power supply. This process will have to be gradual, and ensure that there is no tariff shock to consumers or revenue shock to MSEDCL;
  - The criterion of ‘purpose of supply’ has been used extensively to differentiate between consumer categories, with categories such as residential, non-residential /commercial purposes, industrial purpose, agricultural purpose, street lighting, public service, etc.
- 6.39.4 As discussed earlier in this Chapter, MSEDCL has proposed to merge the HT Continuous (Express Feeder) and non-Continuous (Non-Express Feeder) Supply tariff categories. While the Commission has not accepted this proposal, it has reduced the difference in the tariff between the two sub-categories.
- 6.39.5 Further, the Commission has also differentiated the Public Services category (both HT and LT) between ‘Government Educational Institutions and Hospitals’ and ‘Others’.
- 6.39.6 The Commission has also decided to replace HT Bulk Supply by HT Residential.
- 6.39.7 It has also created a new category for Metro/Mono Rail, with a tariff rate which is slightly higher than for Railways.
- 6.39.8 The Commission has decided to revive the ‘Powerlooms’ sub-category under LT Industries. It has also created a separate category for LT Agriculture (Others), restricting the present Agriculture categories to irrigation pump sets only. The detailed applicability of the categories has been dealt with in the Tariff Schedule.
- 6.39.9 In its Petition and through its subsequent additional submission, MSEDCL has sought to create several other categories and/or sub-categories, and changes in consumption slabs and their application, which the Commission has decided not to accept for reasons discussed in detail earlier in this Order.
- 6.39.10 While consumers would like reductions in their tariffs, the reasonable costs incurred by the Licensee also have to be met, and irrespective of the number of consumer categories or sub-categories, the cross-subsidies also have to be reduced gradually.

- 6.39.11 It may be noted that all previous clarifications given by the Commission through its various Orders continue to be applicable, unless they are specifically contrary to anything that has been stated in this Order, in which case the clarifications in this Order shall prevail. Further, HT VI – Bulk Supply (Residential) Tariff shall be applicable for power supply at single point in cases of (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 (b) Person, for making electricity available to its employees residing in the same premises for residential purposes.
- 6.39.12 Electricity used for the purpose of sewage treatment will fall under Public Water Works since it is undertaken by the same entity, viz., Municipal Corporation or Council, etc. As regards Agricultural tariffs, the Tariff of un-metered agriculture consumption has been increased by a higher rate as compared to metered agriculture consumption so as to further encourage conversion of un-metered connections to metered connections.
- 6.39.13 The detailed computation of category-wise revenue with revised tariffs is provided in the Revenue Schedule, which is annexed as part of this Order (**Annexure I**).
- 6.39.14 The applicability of tariffs for different consumer categories has been stipulated in the Tariff Schedule, which is annexed as a part of this Order (**Annexure II**).

#### **6.40 Stand-by Charges from Mumbai Distribution Licensees**

- 6.40.1 In its MYT Orders for the three Distribution Licensees, viz. TPC-D (Case No. 179 of 2011), RInfra-D (Case No. 9 of 2013) and BEST (Case No. 26 of 2013), the Commission has decided the Stand-by Demand contribution of the three Mumbai Distribution Licensees based on the average of coincident peak demand and non-coincident peak demand used for sharing the Total Transmission System Charges. Based on the revised average of coincident peak demand and non-coincident peak demand, the Commission has determined the share of these three Distribution Licensees in Stand-by Charges for FY 2015-16 payable to MSEDCL, as under:

**Table 120: Stand-by Charges for FY 2015-16**

<b>Distribution Licensees</b>	<b>% Share of Base TCR</b>	<b>Share of Utilities other than MSEDCL</b>	<b>Annual Share of Stand-by Charges (Rs Crore)</b>	<b>Per Month Share of Stand-by Charges (Rs. Crore)</b>
MSEDCL	83.05%			
TPC-D	5.01%	29.58%	117.12	9.76
RInfra-D	7.36%	43.44%	172.03	14.34
BEST	4.57%	26.98%	106.84	8.90
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>396.00</b>	<b>33.00</b>

**6.41 Other key components of Tariff**

- 6.41.1 The issue of increase of Fixed Charges has been discussed in para. 6.7 of this Chapter. Since it is necessary to move towards recovery of Fixed Costs from the fixed component of tariffs, the Commission has increased the Fixed Charges in many categories by around 16%. This increase will result in the recovery of approximately 16.8% of the total revenue from revised tariffs in FY 2015-16 from Fixed Charges.
- 6.41.2 The Commission has continued to determine the tariffs which have an in-built incentive to reduce consumption. The impact on consumer bills is designed to increase as the consumption increases, on account of the higher telescopic tariffs applicable for higher consumption slabs. At the same time, it has been ensured that even the consumers falling in the higher consumption slabs are charged less for the consumption corresponding to the lower consumption slabs.
- 6.41.3 The issue of reduction in ToD rebate for off-peak consumption (i.e. 2200 hours to 0600 hours) has been discussed in Paragraph 6.13. Accordingly, the ToD rebate for off-peak consumption has been reduced from Rs. 2.50 per kWh to Rs. 1.50 per kWh.
- 6.41.4 As discussed in Paragraph 6.10, as against MSEDCL's proposal of merging the HT Continuous (Express Feeder) and Non-Continuous (Non-Express Feeder) tariff slabs and substantially increasing the tariff for the present Non-Continuous consumers, the Commission has decided to retain the classification but reduce the gap in Energy Charge.
- 6.41.5 The ToD tariffs will be applicable compulsorily to HT I, HT II, HT IV, HT IX and HT X categories among the HT categories, and to LT II (B), LT II (C), LT III, LT V (A) (ii), LT V (B) (ii), LT X (A) (ii), LT X (A) (iii), LT X (B) (ii) and LT X (B) (iii) categories among the LT categories having ToD meters; and optionally available to LT II (A), LT V (A) (i), LT V (B) (i), LT X (A) (i) and LT X (B) (i) category consumers who have ToD meters installed. The revised ToD Tariffs are as follows:

**Table 121: ToD Time Slots and Tariffs approved by Commission**

Time Slot	ToD Tariff (Rs. per kWh)
2200 Hrs-0600 Hrs	-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs	0.00
0900 Hrs-1200 Hrs	0.80
1800 Hrs-2200 Hrs	1.10

- 6.41.6 Additional Demand Charges of Rs 20 per kVA per month would be chargeable for the Stand-by component for CPPs, only to the extent of the actual demand recorded exceeding the Contract Demand.

6.41.7 As discussed in Paragraph 6.20, the Billing Demand definition in case of HT categories has been retained at the existing levels, i.e.,

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/Contract Demand, whichever is lower, recorded during the preceding eleven months;
- (c) 50% of the Contract Demand.

## 6.42 Average Cost of Supply, Proposed Tariffs and Approved Tariffs

6.42.1 The computation of ACoS is given below:

**Table 122: Average Cost of Supply for FY 2015-16**

S. No.	Particulars	As Proposed by MSEDCL in its Petition	Approved by the Commission
1	Total Revenue Requirement (Rs. Crore)	64,136	55,602
2	Total Sales (MU)	93,316	92,216
3	<b>Average Cost of Supply (Rs. / kWh)</b>	<b>6.87</b>	<b>6.03</b>

6.42.2 The comparison of the existing tariffs, tariffs proposed by MSEDCL and tariffs approved by the Commission, as well as the percentage increase for each consumer category, are given in the Table below:

**Table 123: LT Category: Average Billing Rate – Existing and Approved Tariff**

Category	Average Cost of Supply (Rs/kWh)	Average Billing Rate (Rs. / kWh)				
		Existing Tariff as on April 2015	Tariff Proposed by MSEDCL		Approved Tariff	
			ABR Rs./kWh	% Increase	ABR Rs./kWh	% Increase
	(a)	(b)	(c)	(d) = (c)/(b) -1	(e)	(f) = (e)/(b) -1
LT I: Residential	<b>6.03</b>	5.69	7.22	27%	5.81	2%
LT II: Non-Residential		10.05	10.83	8%	10.33	3%
LT III: Public Water Works (PWW)		3.25	4.23	30%	3.33	2%
LT IV (A): Agriculture Un-metered – Pumpsets		3.32	3.34	0%	3.53	6%
LT IV (B): Agriculture Metered – Pumpsets		2.75	2.81	2%	2.81	2%
LT IV (C): Agriculture Metered – Others					4.17	
LT V : Industry		7.69	8.09	5%	7.12	-7%
LT VI: Street Lights		5.04	6.81	35%	5.17	2%

Category	Average Cost of Supply (Rs./kWh)	Average Billing Rate (Rs. / kWh)				
		Existing Tariff as on April 2015	Tariff Proposed by MSEDCL		Approved Tariff	
			ABR Rs./kWh	% Increase	ABR Rs./kWh	% Increase
		(a)	(b)	(d) = (c)/(b) -1	( e)	(f) = ( e)/(b) -1
LT VII (B): Temporary Supply Others (TSO)		17.69	17.82	1%	15.66	-11%
LT VIII: Advertisements and Hoardings		26.98	30.59	13%	21.40	-21%
LT IX: Crematorium & Burial Grounds		4.00	5.05	26%	4.12	3%
LT X: Public Services		9.13	10.23	12%	7.76	-15%
<b>Total LT Category</b>		<b>5.08</b>	<b>5.79</b>	<b>14%</b>	<b>5.13</b>	<b>1%</b>

**Table 124: HT Category: Average Billing Rate – Existing and Approved Tariff**

Category	Average Cost of Supply (Rs./kWh)	Average Billing Rate (Rs. / kWh)				
		Existing Tariff as on April 2015	Tariff Proposed by MSEDCL		Approved Tariff	
			ABR Rs./kWh	% Increase	ABR Rs./kWh	% Increase
		(a)	(b)	(d) = (c)/(b) -1	( e)	(f) = ( e)/(b) -1
HT I (A): Industry (Express Feeder)	<b>6.03</b>	8.75	8.95	2%	8.02	-8%
HT I (B): Industry (Non-Express Feeder)		7.90		13%	7.48	-5%
HT II: Commercial		12.89	13.75	7%	12.14	-6%
HT III: Railways		9.37	10.12	8%	8.46	-10%
HT IV: Public Water Works (PWW)		5.89	7.25	23%	6.03	2%
HT V: Agricultural		3.48	3.72	7%	3.56	2%
HT VI: Bulk Supply (Residential)		6.58	8.58	30%	6.90	5%
HT VIII (B): Temporary (Others)		17.91	20.61	15%	16.39	-8%
HT IX: Public Services		9.33	11.20	20%	9.30	-0.3%
HT X: Ports		11.47	13.06	14%	11.32	-1%
<b>Total HT Category</b>		<b>8.47</b>	<b>9.15</b>	<b>8%</b>	<b>7.94</b>	<b>-6%</b>

6.42.3 The prevailing Cross-Subsidy and the reduction in Cross-Subsidy considered by the Commission are given in the Table below:



**Table 125: Cross-Subsidy at Existing and Approved Tariffs**

Category	Average Cost of Supply (Rs/ kWh)	ABR (Rs. / kWh)		Effective Increase in ABR			ABR / ACoS (%)	
		Existing Tariff as on Petition Date (Feb 2015)	Existing Tariff as in April 2015	Approved Tariff (Rs. /kWh)	Increase/ (Decrease) from Petition Date (Feb 2015) Tariff (%)	Increase / (Decrease) from Existing (April 2015) Tariff (%)	Existing Tariff ABR / ACoS (%) as per Case No. 19 of 2012)	Approved Tariff / ACoS
		(b)	(c)	(d)	(e) = (d)/(b) - 1	(f) = (d)/(c) - 1	(g)	(h) = (d) / (a)
LT I: Residential	<b>6.03</b>	5.95	5.69	5.81	-2%	2%	88%	96%
(A) BPL		1.52	1.39	1.39	-8%	0%	21%	23%
(B) Domestic (other than BPL)		5.98	5.71	5.84	-2%	2%	89%	97%
LT II: Non-Residential		10.78	10.05	10.33	-4%	3%	176%	171%
LT III: Public Water Works (PWW)		3.46	3.25	3.33	-4%	2%	53%	55%
LT IV (A): Agriculture Pumpsets – Un-metered		3.34	3.32	3.53	6%	6%	44%	59%
LT IV (B): Agriculture Pumpsets – Metered		2.81	2.75	2.81	0%	2%	42%	47%
LT IV (C): Agriculture Others – Metered		2.81	2.75	4.17				69%
LT V: Industry		8.17	7.69	7.12	-13%	-7%	129%	118%
LT VI: Street Lights		5.38	5.04	5.17	-4%	2%	84%	86%
LT VII (B): Temporary Supply Others (TSO)		18.71	17.69	15.66	-16%	-11%	280%	260%
LT VIII: Advertisements and Hoardings		29.38	26.98	21.40	-27%	-21%	420%	355%
LT IX: Crematorium & Burial Grounds		4.31	4.00	4.12	-4%	3%	67%	68%
LT X: Public Services		9.34	9.13	7.76	-17%	-15%	129%	129%
<b>Total LT Categories</b>		<b>5.26</b>	<b>5.08</b>	<b>5.13</b>	<b>-3%</b>	<b>1%</b>	<b>78%</b>	<b>85%</b>
HT I: Industry	<b>6.03</b>	8.55	8.35	7.76	-9%	-7%	135%	129%
HT I (A): Industry (Express Feeder)		8.93	8.75	8.02	-10%	-8%	138%	133%
HT I (B): Industry (Non-Express Feeder)		8.13	7.90	7.48	-8%	-5%	131%	124%
HT II: Commercial		13.18	12.89	12.14	-8%	-6%	201%	201%
HT III: Railways		9.41	9.37	8.46	-10%	-10%	140%	140%
HT IV: Public Water Works (PWW)		6.16	5.89	6.03	-2%	2%	99%	100%
HT V: Agriculture		3.75	3.48	3.56	-5%	2%	56%	59%
HT VI: Bulk Supply (Residential)		6.74	6.58	6.90	2%	5%	98%	114%
HT VIII (B): Temporary Supply Others (TSO)		19.35	17.91	16.39	-15%	-8%		272%
HT IX (A): Public Services - Government		10.11	9.33	7.64	-24%	-18%		127%

Category	Average Cost of Supply (Rs/ kWh)	ABR (Rs. / kWh)		Effective Increase in ABR			ABR / ACoS (%)	
		Existing Tariff as on Petition Date (Feb 2015)	Existing Tariff as in April 2015	Approved Tariff (Rs. /kWh)	Increase/ (Decrease) from Petition Date (Feb 2015) Tariff (%)	Increase / (Decrease) from Existing (April 2015) Tariff (%)	Existing Tariff ABR / ACoS (%) as per Case No. 19 of 2012)	Approved Tariff / ACoS
		(a)	(b)	(d)	(e) = (d)/(b) - 1	(f) = (d)/(c) - 1	(g)	(h) = (d) / (a)
HT IX (B): Public Services - Others				9.30	-8%	0%	161%	154%
HT X: Ports		12.22	11.47	11.32	-7%	-1%		188%
<b>Total HT Category</b>		<b>8.70</b>	<b>8.47</b>	<b>7.94</b>	<b>-9%</b>	<b>-6%</b>	<b>135%</b>	<b>132%</b>

6.42.4 In the above Table,

- (a) 'Existing Tariff as in April 2015' refers to the tariff currently payable by consumers including the present FAC;
- (b) 'Approved Tariff' refers to the tariff approved by the Commission in this Order;
- (c) Ratio of Average Billing Rate (ABR) to Average Cost of Supply (ACoS)
- (d) 'Existing Tariff - ABR/ACoS (%) as per Case No. 19 of 2012)' refers to the ratio of ABR determined in Case No. 19 of 2012 to the ACoS approved in Case No. 19 of 2012, i.e., Rs. 5.56 per kWh
- (e) 'Approved Tariff' to current ACoS' refers to the ratio of ABR approved in this MYT Order for FY 2015-16 to the ACoS approved in the present MYT Order, i.e., Rs. 6.03 per kWh

6.42.5 While the Tariffs have been determined such that the Revenue Gap/(Surplus) approved for the year is met/adjusted entirely through the revision in tariffs, it is possible that the actual revenue earned by MSEDCL may be higher or lower than that considered by the Commission on account of the re-categorisation and creation of new consumer categories/sub-categories. The revenue shortfall/surplus, if any, will be trued up, subject to prudence check, at the time of provisional Truing up for FY 2015-16.

#### 6.43 Revised Tariff with effect from 1 June 2015

**Table 126: Summary of LT Tariffs effective from 1 June, 2015**

Consumer Category and Consumption Slab	Approved Tariff Rate	
	Fixed / Demand Charge	Energy Charge (Rs. / kWh)
<b>LT I: LT – Residential</b>		
<b>LT I (A): LT - Residential (BPL)</b>	Rs 10 per month	0.87
<b>LT I (B): LT - Residential (other than BPL)</b>		
1-100 units	Single Phase: Rs 50 per month	3.76

Consumer Category and Consumption Slab	Approved Tariff Rate	
	Fixed / Demand Charge	Energy Charge (Rs. / kWh)
101 – 300 units	Three Phase: Rs 150 per month\$\$	7.21
301 – 500 units		9.95
501-1000 units		11.31
Above 1000 Units (balance units)		12.50
LT II: LT – Non-Residential		
LT II (A): 0-20 kW		
0 – 500 units per month	Rs 220 per month	6.60
Above 500 units per month (only balance consumption)	Rs 220 per month	9.62
LT II (B): > 20 kW and ≤ 50 kW	Rs 220 per kVA per month	10.20
LT II (C ): > 50 kW	Rs 220 per kVA per month	13.01
LT III: LT – Public Water Works (PWW) & Sewage Treatment Plants		
LT III (A): 0-20 kW	Rs 60 per kVA per month	2.70
LT III (B): > 20 kW and ≤ 40 kW	Rs 70 per kVA per month	3.80
LT III (C ): > 40 kW	Rs 105 per kVA per month	5.00
LT IV: LT – Agriculture		
LT IV (A): LT - Agriculture Un-metered - Pumpsets		
Zones with above 1318 Hrs/HP/Annum		
0 - 5 HP	Rs 502 per kW per month	
	Rs 374 per HP per month	
Above 5 HP	Rs 544 per kW per month	
	Rs 406 per kW per month	
Zones with below 1318 Hrs /HP /Annum		
0 - 5 HP	Rs 379 per kW per month	
	Rs 283 per HP per month	
Above 5 HP	Rs 415 per kW per month	
	Rs 310 per HP per month	
LT IV (B): LT - Agriculture Metered - Pumpsets	Rs 27 per kW per month	2.58
	Rs 20 per HP per month	
LT IV (C ): LT - Agriculture Metered - Others	Rs 50 per kW per month	3.60
LT V: LT – Industry		
LT V (A): LT – Industry – Power Looms		
LT V (A) (i): 0-20 kW (upto and including 27 HP)	Rs 220 per connection per month	5.43
LT V (A) (ii): Above 20 kW (above 27 HP)	Rs 150 per kVA per month	6.88
LT V (B): LT – Industry – General		
LT V (B) (i): 0-20 kW (upto and including 27 HP)	Rs 220 per connection per	5.51

Consumer Category and Consumption Slab	Approved Tariff Rate	
	Fixed / Demand Charge	Energy Charge (Rs. / kWh)
	month	
LT V (B) (ii): Above 20 kW (above 27 HP)	Rs 150 per kVA per month	6.98
<b>LT VI: LT – Street Lights</b>		
(A) Gram Panchayat, A, B, & C Class Municipal Council	Rs 50 per kW per month	4.78
(B) Municipal Corporation Areas	Rs 50 per kW per month	5.80
<b>LT VII: LT – Temporary Supply</b>		
LT VII (A): Temporary Supply Religious - TSR	Rs 290 per connection per month	3.71
LT VII (B): Temporary Supply Others - TSO	Rs 360 per connection per month	15.00
<b>LT VIII: LT – Advertisements &amp; Hoardings</b>	Rs 575 per connection per month	17.00
<b>LT IX: LT – Crematorium and Burial Grounds</b>	Rs 290 per connection per month	3.91
<b>LT X: LT – Public Services</b>		
LT X (A): LT – Public Services: Government		
LT X (A) (i): 0-20 kW		
0 – 200 units per month	Rs 220 per connection per month	4.54
Above 200 units per month (only balance consumption)	Rs 220 per connection per month	5.84
LT X (A) (ii): > 20 kW and ≤ 50 kW	Rs. 220 per kVA per month	6.50
LT X (A) (iii): > 50 kW	Rs. 220 per kVA per month	7.20
LT X (B): Public Services - Others		
LT X (B) (i) 0-20 kW		
0 – 200 units per month	Rs 220 per connection per month	4.92
Above 200 units per month (only balance consumption)	Rs 220 per connection per month	7.22
LT X (B) (ii) > 20 kW and ≤ 50 kW	Rs. 220 per kVA per month	7.32
LT X (B) (iii) > 50 kW	Rs. 220 per kVA per month	7.68
<b>ToD Tariffs (in addition to above base tariffs):</b>		
– <b>compulsory</b> for LT II (B), LT II (C), LT III, LT V (A) (ii), LT V (B) (ii), , LT X (A) (ii), LT X (A) (iii), LT X (B) (ii) and LT X (B) (iii) categories		
– <b>optional</b> for LT II (A), LT V (A) (i), LT V (B) (i), LT X (A)(i) and LT X (B) (i) categories		
2200 Hrs – 0600 Hrs		-1.50
0600 Hrs – 0900 Hrs & 1200 Hrs – 1800 Hrs		0.00

Consumer Category and Consumption Slab	Approved Tariff Rate	
	Fixed / Demand Charge	Energy Charge (Rs. / kWh)
0900 Hrs – 1200 Hrs		0.80
1800 Hrs – 2200 Hrs		1.10

**Notes:**

1. The FAC Component of Z factor charge will be determined based on the approved formula and relevant directions as may be given by the Commission from time to time, and will be applicable to all consumer categories for their entire consumption.
2. In case of any variation in the fuel prices and power purchase prices with respect to these levels, MSEDCL shall pass on the adjustments from changes in the cost of power procured due to change in fuel cost through the Fuel Adjustment Cost (FAC) component of Z-factor Charge, as specified in Regulations 13.4 to 13.9 of the MYT Regulations.
3. The details of applicable  $Z_{FAC}$  for each month shall be available on the MSEDCL website [www.mahadiscom.in](http://www.mahadiscom.in).
4. \$\$: Additional Fixed Charge of Rs. 100 per 10 kW load or part thereof above 10 kW load shall be payable.
5. #: Street lights having automatic timers for switching on/off would be levied Demand Charges on the lower of the following:
  - A. 50% of the Contract Demand
  - B. Actual Recorded Demand
6. Billing Demand for all LT categories where MD based Tariff is applicable:
7. 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

**Table 127: Summary of HT Tariffs effective from 1 June, 2015**

Consumer Category and Consumption Slab	Approved Tariff Rate	
	Fixed / Demand Charge	Energy Charge (Rs. / kWh)
<b>HT I: HT – Industry</b>		
HT I (A): Express Feeders	Rs 220 per kVA per month	7.21
HT I (B): Non-Express Feeders	Rs 220 per kVA per month	6.71
HT I (C): Seasonal Industry	Rs 220 per kVA per month	7.80
<b>HT II: HT – Commercial</b>		

Consumer Category and Consumption Slab	Approved Tariff Rate	
	Fixed / Demand Charge	Energy Charge (Rs. / kWh)
HT II (A): Express Feeders	Rs 220 per kVA per month	11.15
HT II (B): Non-express Feeders	Rs 220 per kVA per month	10.62
<b>HT III: HT – Railways</b>	NIL	8.46
<b>HT IV: HT – Public Water Works &amp; Sewage Treatment Plants</b>		
HT IV (A): Express Feeders	Rs 220 per kVA per month	5.64
HT IV (B): Non-express Feeders	Rs 220 per kVA per month	5.42
<b>HT V: HT – Agriculture</b>	Rs 30 per kVA per month	3.32
<b>HT VI: HT – Bulk Supply (Residential)</b>	Rs 220 per kVA per month	5.81
<b>HT VIII: HT – Temporary Supply</b>		
HT VIII (A): HT – Temporary Supply Religious (TSR)	Rs 290 per connection per month	3.71
HT VIII (B): HT – Temporary Supply Others (TSO)	Rs 290 per connection per month	12.50
<b>HT IX: HT – Public Services</b>		
<b>HT IX (A): HT - Public Services – Government</b>		
HT IX (A) (i): Express Feeders	Rs 220 per kVA per month	7.20
HT IX (A) (ii): Non-Express Feeders	Rs 220 per kVA per month	6.60
<b>HT IX (B): HT - Public Services - Others</b>		
HT IX (B) (i) Express Feeders	Rs 220 per kVA per month	8.89
HT IX (B) (ii) Non-express Feeders	Rs 220 per kVA per month	8.41
<b>HT X: HT – Ports</b>	Rs 220 per kVA per month	10.91
<b>HT XI: HT – Metro/Monorail</b>	Rs 220 per kVA per month	8.46
<b>ToD Tariffs (in addition to above base tariffs) – compulsory for HT I, HT II, HT IV, HT IX and HT X categories</b>		
2200 Hrs – 0600 Hrs		-1.50
0600 Hrs – 0900 Hrs & 1200 Hrs – 1800 Hrs		0.00
0900 Hrs – 1200 Hrs		0.80
1800 Hrs – 2200 Hrs		1.10

**Notes:**

- HT V category includes HT Lift Irrigation Schemes, irrespective of ownership.

2. The FAC Component of the Z factor charge will be determined based on the approved formula and relevant directions as may be given by the Commission from time to time, and will be applicable to all consumer categories for their entire consumption.
3. In case of any variation in the fuel prices and power purchase prices with respect to these levels, MSEDCL shall pass on the adjustments due to changes in the cost of power procured due to change in fuel cost through the Fuel Adjustment Cost (FAC) component of Z-factor Charge, as specified in Regulations 13.4 to 13.9 of the MYT Regulations.
4. The details of applicable  $Z_{FAC}$  for each month shall be available on the MSEDCL website [www.mahadiscom.in](http://www.mahadiscom.in).
5. Billing Demand for all HT categories (except HT I (C): HT - Industry Seasonal category): the Monthly Billing Demand will be the higher of the following:
  - i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
  - ii. 75% of the highest Billing Demand recorded during the preceding eleven months
  - iii. 50% of the Contract Demand
6. Billing Demand for HT Seasonal Category (HT I) –  
During Declared Season, Monthly Billing Demand will be the higher of the following:
  - i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
  - ii. 75% of the Contract Demand
  - iii. 50 kVA.

During Declared Off-season, Monthly Billing Demand will be the following:

- i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours.
7. Additional Demand Charges for HT Industrial Consumers with CPPs
    - i. High Tension Industrial consumers having captive generation facility synchronised with the grid will pay Additional Demand Charges of Rs. 20/kVA/Month only on the extent of stand-by Contract Demand component and not on the entire Contract Demand (Stand-by Contract Demand component).
    - ii. Stand-by Charges will be levied on such consumers on the Stand-by component, only if the consumer's demand exceeds the Contract Demand.
    - iii. This Additional Demand Charge will not be applicable if there is no stand-by demand and the CPP is synchronised with the Grid only for the export of power.
    - iv. Only HT industries connected on express Feeders and demanding continuous supply will be deemed as HT Continuous Industry and given continuous supply, while all other HT industrial consumers will be deemed as HT non-Continuous Industry.

#### **6.44 Pass through of variation in cost of power purchase**

- 6.44.1 In case of any variation cost of power purchase, MSEDCL will pass on the corresponding increase to the consumers through the existing FAC mechanism, subject to the stipulated ceiling of 20% of the Energy Charges.



**6.45 Vetting of Fuel Adjustment Cost levied on consumers**

- 6.45.1 The levy of FAC charged to different consumers and the under-recovery/over-recovery of the corresponding costs will be vetted by the Commission on a post-facto basis, considering submissions made by MSEDCL. However, for the first month after the issue of the Order, MSEDCL should obtain the Commission's prior approval for levy of FAC, to ensure that the FAC is being levied correctly. MSEDCL should submit the FAC computations and details of under-recovery/over-recovery of fuel cost variations on a bi-monthly basis, as applicable.

**6.46 Wheeling Charges**

- 6.46.1 In the Tariff Order (Case No. 19 of 2012) for FY 2011-12, the Commission approved Wheeling Charges and wheeling losses at HT and LT levels for FY 2011-12 as under:

**Table 128: Approved Wheeling Charges and Losses in Case No. 19 of 2012**

Particulars	Wheeling Charges (Rs./kWh)	Wheeling Losses (%)
33 kV	0.11	6.00%
22 kV / 11 kV	0.60	9.00%
LT Level	1.03	12.50%

- 6.46.2 In previous Orders pertaining to MSEDCL, the Commission had observed that separate accounting of network and supply-related costs was essential for unbundling of cost and tariff components, and was a pre-requisite for appropriate determination of Wheeling Charges. Also, network costs needed to be further segregated in terms of voltage level (33 kV, 22 kV/11 kV, and LT). The Commission had directed MSEDCL to submit voltage-wise segregated Wires cost components. The Commission had also directed MSEDCL to maintain the accounts for expenses incurred on Wires Business and Supply Business separately, and to submit them.
- 6.46.3 However, MSEDCL has still not maintained network and supply-related costs separately. In its Petition, MSEDCL submitted that it has applied the same ratio of network and supply cost segregation as approved by the Commission in its Business Plan Order dated 26 August, 2013 to arrive at the network-related costs. MSEDCL has stated that:

*“MSEDCL does not maintain Audited Accounts for voltage wise assets. However, based on the engineering study of its assets MSEDCL has arrived at the following segregation. MSEDCL would like to emphasize that this statement is only based on engineering estimate as it does not have accurate audited data. MSEDCL would like to submit that it does not have segregation between GFA of 22/11 V level and LT level*



assets. Hence, MSEDCL for the purpose of projection has segregated 22/11 kV level GFA as shown in the table below...”

- 6.46.4 MSEDCL has applied the voltage-wise GFA ratio as approved by the Commission in its Tariff Order dated 16 August, 2012. The GFA of MSEDCL has been segregated in terms of various voltage levels, and the estimated sales at each level projected by MSEDCL as shown below.

**Table 129: Voltage-wise ratio and estimated Sales as submitted by MSEDCL**

Particulars	Voltage-wise GFA Ratio	Sales (% of Total)	Sales (MU)
33 kV	14%	11.23%	9,791
22 kV / 11 kV	56%	33.68%	29,365
LT Level	30%	55.09%	48,032

- 6.46.5 To arrive at the cost of wheeling at the various voltage levels, the total Wires network cost at various voltage levels has been apportioned to different voltage levels (i.e., 33 kV, 22 kV/11 kV and LT) in the ratio of sales at the respective levels. The Wires costs at higher voltage levels has been further apportioned to lower voltage levels, since the HT system is also being used for LT supply.
- 6.46.6 Subsequently, MSEDCL has calculated the share of each voltage category in the non coincident peak demand using percentage sales for each category. The Wheeling Charges (in Rs./kW/month) was then derived by dividing the wheeling cost of each voltage category by the non-coincident peak demand for that category and dividing it by 12 months. Finally, the Wheeling Charges for each category were computed by dividing the Wheeling Charges (in Rs./kW/month) for each category by the Load Factor (assumed to be 66%) and 720 hrs (24x30).
- 6.46.7 MSEDCL proposed that the Wheeling Losses determined by the Commission in its Tariff Order for drawal at 33 kV and 22/11 kV be applicable without change. It submitted that consumers seeking OA at LT level should be levied with a Distribution Loss 0.25% less in FY 2014-15 than the Loss in FY 2013-14, and a further 0.25% less in FY 2015-16. Hence, MSEDCL has proposed the Wheeling Loss applicable for OA transactions entailing drawal at LT level as 12.25% and 12.00% for FY 2014-15 and FY 2015-16, respectively. The proposed Wheeling Charges and Losses at each voltage level were proposed as below:

**Table 130: Proposed Wheeling Charges for FY 2014-15 and 2015-16**

Particulars	FY 2014-15		FY 2015-16	
	Wheeling Charges (Rs./kWh)	Wheeling Losses (%)	Wheeling Charges (Rs./kWh)	Wheeling Losses (%)
33 kV	0.23	6.00%	0.22	6.00%

Particulars	FY 2014-15		FY 2015-16	
	Wheeling Charges (Rs./kWh)	Wheeling Losses (%)	Wheeling Charges (Rs./kWh)	Wheeling Losses (%)
22 kV / 11 kV	1.27	9.00%	1.23	9.00%
LT Level	2.17	12.25%	2.11	12.00%

6.46.8 For the reasons explained in Paragraph 6.29 the Commission is determining Wheeling Charges only for FY 2015-16. For computing the Wheeling Charges applicable for FY 2015-16, in the absence of Voltage-wise Network Cost details from MSEDCL, the Commission has considered the voltage-wise GFA ratio and the ratio of sales across the categories as proposed by MSEDCL, which is summarised below.

**Table 131: GFA and Sales considered by the Commission**

Particulars	Voltage-wise GFA Ratio (%)	Sales (% of Total)
33 kV	14%	11.23%
22 kV / 11 kV	56%	33.68%
LT Level	30%	55.09%

6.46.9 The network ARR, as approved by the Commission for FY 2015-16 in Chapter 3, forms the basis for determination of Wheeling Charges, and has been reproduced below.

**Table 132: Determination of Network Cost for FY 2015-16 (Rs Crore)**

Sr. No.	Particulars	Projected by MSEDCL	Approved
1	Power Purchase Expenses (including Inter-State Transmission Charges)	670	-
2	Operation & Maintenance Expenses	4,988	4,627
3	Depreciation Expenses	2,060	1,920
4	Interest on Long-term Loan Capital	1,351	1,512
5	Interest on Working Capital and on consumer security deposits	306	268
6	Other Finance Charges	35	35
7	Provisioning for Bad & Doubtful Debts	35	21
8	Income Tax	10	0.04
9	Contribution to Contingency Reserves	94	91
10	<b>Total Revenue Expenditure</b>	<b>9,550</b>	<b>8,475</b>
11	Return on Equity Capital	1,587	1,359
12	<b>Aggregate Revenue Requirement</b>	<b>11,137</b>	<b>9,835</b>
13	Less: Income from Wheeling Charges	21	21

Sr. No.	Particulars	Projected by MSEDCL	Approved
14	Less: Income from Open Access Charges	445	311
15	<b>Aggregate Revenue Requirement for Wires Business</b>	<b>10,671</b>	<b>9,502</b>

6.46.10 The Commission has computed the share of each voltage category in the non-coincident peak demand using % sales for each category.

**Table 133: Voltage-wise Share of Network Cost for FY 2015-16**

Particulars	Network Cost (in the ratio of GFA) (Rs. Crore)	Sales (MU)	% of Sales between three levels	% of Sales between 22/11 kV and LT Level	Wheeling Cost break-up for 33 kV (Rs. Crore)	Wheeling Cost break-up for 22/11 kV (Rs. Crore)	Wheeling Cost break-up for LT Level (Rs. Crore)	Total Wheeling Cost (Rs. Crore)
33 kV	1,330	10,356	11.23%		149			149
22 kV / 11 kV	5,321	31,059	33.68%	37.94%	448	2,019		2,467
LT Level	2,851	50,802	55.09%	62.06%	733	3,302	2,851	6,886
<b>Total</b>	<b>9,502</b>	<b>92,216</b>	<b>100.00%</b>	<b>100.00%</b>	<b>1,330</b>	<b>5,321</b>	<b>2,815</b>	<b>9,502</b>

6.46.11 The Wheeling Charge (in Rs./kW/month) was then derived by dividing the wheeling cost of each voltage category by the average of coincident and non-coincident peak demand for that voltage level as per the latest TTSC Order, and dividing it by 12 for per month computation. Further, the Wheeling Charges for each category were calculated by dividing the Wheeling Charge (in Rs./kW/month) for each category by the Load Factor (assumed to be 66%) and 720 hrs (24x30). Therefore, the approved Wheeling Charges and Losses for FY 2015-16 are as shown below.

**Table 134: Wheeling Charges approved for FY 2015-16**

Particulars	Wheeling Loss (%)	Total Wheeling Cost (Rs. Crore)	Share in Average of CPD and NCPD (MW)	Wheeling Charge (Rs./kW/ Month)	Wheeling Charges @ 66% Load Factor (Rs. / kWh)
33 kV	6.00%	149	1,729	72	0.15
22 kV / 11 kV	9.00%	2,467	5,189	396	0.83
LT Level	12.00%	6,886	8,486	676	1.42
<b>Total</b>		<b>9,502</b>	<b>15,404</b>	<b>514</b>	<b>1.08</b>

6.46.12 Accordingly, the Commission has determined the Wheeling Charges and Wheeling Losses for FY 2015-16 as under:

**Table 135: Proposed and Approved Wheeling Charges & Wheeling Losses for 2015-16**

Particulars	MSEDCL Petition		Approved	
	Wheeling Charges (Rs./kWh)	Wheeling Losses (%)	Wheeling Charges (Rs./kWh)	Wheeling Losses (%)
33 kV	0.22	6.00%	0.15	6.00%
22 kV / 11 kV	1.23	9.00%	0.83	9.00%
LT Level	2.11	12.00%	1.42	12.00%

- 6.46.13 Regulation 73.2 of the MYT Regulations provides for determination of Wheeling Charges in terms of Rs./kWh or Rs./kWh/Month:

*“73.2 The wheeling charges of the Distribution Licensee shall be determined by the Commission on the basis of an application for determination of tariff made by the Distribution Licensee in accordance with Part C of these Regulations.*

*Provided that the wheeling charges may be denominated in terms of Rupees/kWh or Rupees/kW/month, for the purpose of recovery from the Distribution System User, or any such denomination, as stipulated by the Commission from time to time.”*

- 6.46.14 However, for the sake of bringing simplicity to the tariff structuring, the combined tariff has been computed, considering the Wires and Supply components together. Accordingly, the Wheeling Charge component has been subsumed in the Energy Charge, and has not been shown separately, while computing category-wise tariffs, with the exception of the BPL category. In case of the BPL category, only partial Wheeling Charges are apportioned, in order to avoid economic hardship to the weaker section of society.

## **6.47 Voltage-wise Cost of Supply**

- 6.47.1 In its recent Judgment dated 24 March, 2015 in Appeal No. 103 of 2012, the ATE has ruled on the issue of determination of tariff and cross-subsidy with reference to the VCoS, as reproduced below:

*“68. This Tribunal in the various judgments from the year 2006 onwards has repeatedly stated that the tariffs have to be determined considering both the overall average cost of supply of the distribution licensees and the voltage-wise cost of supply. The principles laid down by this Tribunal are as under:-*

*“i) The cost of supply referred in Section 61(g) is the cost of supply to the consumer category and not overall average cost of supply.*

*ii) The cross subsidy for a consumer category is the difference between cost to serve that category of consumer and average tariff realization for that category of consumer.*

*iii) The State Commission has to determine the category wise cost of supply as well as overall average cost of supply to all the consumers of the distribution licensee.*

iv) *While the cross subsidies have to be reduced progressively and gradually in the manner specified by the Appropriate Commission so as to avoid tariff shock to the subsidised categories of consumers, it is not the intention of the legislation that cross subsidies have to be eliminated. Therefore, it is not necessary that the tariff should be the mirror image of actual cost of supply to the concerned category of consumer and to make the cross subsidy zero.*

v) *The subsidising consumers should not be subjected to disproportionate increase in tariff so as to subject them to tariff shock.*

vi) *The State Commission should fix a limit of consumption for the subsidised consumer categories and once a consumer exceeds that limit he has to be charged at normal tariff.*

vii) *Tariff for consumer below the poverty line will be at least 50% of the average cost of supply. **Tariffs for all other categories should be within  $\pm 20\%$  of the overall average cost of supply for the distribution licensee by the end of 2010-11.***

viii) *The tariffs can be differentiated according to consumer's load factor, voltage, total consumption of electricity during specified period or the time or the geographical location, the nature of supply and the purpose for which electricity is required. For example, the consumers in domestic category can be differentiated from the consumers in Industrial category or commercial category on the basis of purpose for which electricity is required.*

ix) ***The Tribunal in Appeal no. 102 of 2010 and batch in Tata Steel case has also given a formulation for determination of voltage-wise cost of supply in the absence of availability of detailed data."***

69. *This Tribunal in Tata Steel Ltd. gave a method for determination of cost of supply for different consumer categories. **It was held that in the absence of segregated network costs, it would be prudent to work out voltage-wise cost of supply taking into account the distribution losses at different voltage levels as a first major step in the right direction. As power purchase cost is a major component of tariff, apportioning the power purchase cost at different voltage levels taking into account the distribution loss at the relevant voltage level and the upstream system will facilitate determination of voltage-wise cost of supply. Thus, a practical method was suggested to reflect the consumer-wise cost of supply. However voltage-wise cost of supply would also require determination of distribution loss at different voltage levels of the distribution system."***

6.47.2 The framework stipulated by the ATE requires that the category-wise tariffs be determined on the basis of ACoS as well as VCoS, and also that tariffs for all categories should be within  $\pm 20\%$  of the overall ACoS of the Distribution Licensee. The Commission has endeavoured to ensure that the tariffs of most categories are within  $\pm 20\%$  of the ACoS, as stipulated in the Tariff Policy.

6.47.3 In its additional submission, MSEDCL has stated that, since the actual data based on voltage-wise cost has not been maintained, it has undertaken the bifurcation of the cost on the basis of certain assumptions, which are also in line with the ATE Order. The power purchase and transmission cost was bifurcated on the basis of

input at voltage level, which is computed based on the energy loss of 0% at EHV level, 3.0% at HT level and the balance 17.05% at the LT Level. All other costs were computed in the ratio of sales. Accordingly, MSEDCL submitted the voltage-wise cost segregation summarised below.

**Table 136: MSEDCL working of Voltage-wise Cost of Supply for FY 2015-16**

Particulars	Units	EHV	HT	LT	Total
Sales	MU	9,460	30,620	59,492	<b>99,572</b>
Technical & Commercial Loss	%	0.00%	3.00%	17.05%	
Energy Input	MU	9,460	31,567	73,939	<b>1,14,966</b>
Net Power Purchase Cost including Transmission Charges	Rs. Crore	3,787	12,637	29,600	<b>46,025</b>
Other Costs	Rs. Crore	1,147	3,713	7,215	<b>12,075</b>
Stand-alone Costs	Rs. Crore	4,934	16,351	36,815	<b>58,100</b>
Stand-alone Cost to Serve at Voltage Level	Rs. / kWh	5.22	5.34	6.19	<b>5.83</b>
Recoveries of Past (allocated in the ratio of Sales)	Rs. Crore	583	1,886	3,665	<b>6,134</b>
Total Cost to Serve at Voltage Level	Rs. Crore	5,517	18,237	40,480	<b>64,234</b>
<b>Total Cost to Serve at Voltage Level</b>	<b>Rs. / kWh</b>	<b>5.83</b>	<b>5.96</b>	<b>6.80</b>	<b>6.45</b>

6.47.4 In the absence of any scientific data or technical studies for ascertaining voltage-wise loss levels, the Commission has considered MSEDCL's assumptions and methodology as against the ARR components approved by the Commission, and determined the VCoS for FY 2015-16 as under:

**Table 137: Commission's computation of Voltage-wise Cost of Supply for FY 2015-16**

Particulars	Units	EHV	HT	LT	Total
Sales	MU	9,404	29,431	53,382	92,216
Technical & Commercial Loss	%	0.00%	6.00%	18.99%	
Energy Input	MU	9,404	31,310	65,895	1,06,608
Net Power Purchase Cost including Transmission Charges	Rs. Crore	3,959	13,180	27,738	44,877
Other Costs	Rs. Crore	1,197	3,746	6,794	11,737
Stand-alone Costs	Rs. Crore	5,155	16,926	34,532	56,613
Stand-alone Cost to Serve at Voltage Level	Rs. / kWh	5.48	5.75	6.47	6.14
Recoveries of Past (allocated in the ratio of Sales)	Rs. Crore	(103)	(323)	(585)	(1,011)
Total Cost to Serve at Voltage Level	Rs. Crore	5,052	16,603	33,947	55,602
<b>Total Cost to Serve at Voltage Level</b>	<b>Rs. / kWh</b>	<b>5.37</b>	<b>5.64</b>	<b>6.36</b>	<b>6.03</b>

- 6.47.5 The Commission is of the view that there is a need to work out the VCoS in a more scientific manner, wherein the actual data based on technical studies is ascertained and subjectivity or assumptions in the determination of VCoS are minimised. The Commission directs MSEDCL to submit a detailed methodology of working out the VCoS, along with justification for each of the assumptions, and possible computation options within 3 months.
- 6.47.6 The Commission working towards reduction in cross-subsidy levels in its Tariff Orders by gradually improving the cost coverage of different categories of consumers without causing tariff shock to any category. The cost coverage for different categories of consumers has been assessed based on the ACoS. If the basis is suddenly changed to cost at voltage level instead of ACoS, the trend being followed by the Commission would be upset during this Control Period. Further any effort to regulate cost coverage based on the cost at voltage levels at this juncture is likely to result in tariff shock to certain categories of consumers. The ATE has, while directing that cost at different voltage levels be worked out and the cross subsidies assessed accordingly, also directed that the directions may be implemented without causing tariff shock to any category of consumers.
- 6.47.7 In view of the above, the Commission has taken a considered decision to continue the determination of category-wise tariff and cross-subsidy on the basis of the ACoS for the present Control Period. A similar approach has been followed by the Commission for all other Distribution Licensees in the State. However, the Commission directs MSEDCL to undertake a detailed study for determination of VCoS and submits its findings in its next Petition for Tariff determination.

#### **6.48 Cross-Subsidy Surcharge**

- 6.48.1 The Commission notified the MERC (Distribution OA) Regulations, 2014 on 25 June, 2014. The relevant extracts of the above-said Regulations are reproduced below:

***"17. Cross Subsidy Surcharge***

*17.1 Every consumer of a Distribution Licensee who has been granted Open Access in accordance with these Regulations or any consumer situated within area of the supply of Distribution Licensee and/or receiving supply from a Generating Company using dedicated transmission line, shall be liable to pay a cross subsidy surcharge, as may be stipulated, as a condition for availing Open Access:...*

***17.3 The formula for the purpose of determination of Cross-Subsidy Surcharge shall be as under:***

$$S = T - [C (1 + L / 100) + D]$$

***Where,***

***S is the surcharge;***



***T is the Tariff payable by the relevant category of consumers;***

***C is the Weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power;***

***D is the Wheeling charge in per kWh basis;***

***L is the Distribution System Losses as stipulated by the Commission in accordance with Regulation 25.2 of these Regulations for the applicable voltage level, expressed as a percentage;***

*Provided that in case the above formula gives negative value of surcharge, the same shall be zero:*

*Provided that 'L' shall be the losses at the voltage level of the consumer category and shall include the transmission losses corresponding to the source of power purchase component 'C':*

*Provided further that the concessions to the applicable surcharge, if any, in case the Open Access consumer purchases power from a Renewable source of energy, shall be stipulated by the Commission from time to time:*

***Provided further that the Commission may, if required, revisit the formula and modify the same by general or special Order.***

*17.4 The Cross-Subsidy Surcharge payable to the Distribution Licensee by consumer shall be determined by the Commission in the Tariff Order of the Distribution Licensees or any other Order issued by the Commission:*

*Provided further that as and when the Cross subsidy reduction road-map is specified the surcharge to be levied on consumers shall be revised by the Commission.*

*17.5 The Distribution Licensee shall submit full details of the calculation of cross subsidy surcharge within the area of supply of such Distribution Licensee together with its application for determination of tariff submitted to the Commission in accordance with the provisions of clause (d) of sub-section (1) of Section 62 of the Act."*

- 6.48.2 In accordance with the above Regulations, the Commission has computed the category-wise CSS for MSEDCL, based on the approved values of various components of the CSS formulae, as explained in the paragraphs below.
- 6.48.3 **Computation of 'C':** Computation of "C" for MSEDCL is based on the approved power purchase quantum and cost per unit for FY 2015-16. The Merit Order Stack for the approved power purchase, excluding RE, is shown as under:

**Table 138: Merit Order Stack for FY 2015-16**

Source	Energy (MU)	Per Unit Total Cost of Power Purchase (Rs/kWh)
VSTP V	557	4.98
Parli Unit No. 8	451	4.16
Khaperkheda Unit No. 5	3,072	4.12



Source	Energy (MU)	Per Unit Total Cost of Power Purchase (Rs/kWh)
Paras Unit No. 3 and Unit No. 4	3,125	3.65
Adani power 1200	8,220	3.56
India Bulls Power	5,319	3.56
SIPAT TPS 2	2,068	3.46
VSTP III	2,123	3.34
Chandrapur	11,562	3.21
SIPAT TPS 1	4,363	3.20
TAPP 3&4	3,300	3.14
IPP - JSW	1,913	3.11
Khaperkheda	5,330	3.09
KSTPS III	936	2.98
VSTP II	2,548	2.97
VSTP I	3,268	2.95
EMCO Power	1,370	2.83
Koradi Unit No. 8	2,962	2.75
Koradi Unit No. 10	1,481	2.75
Koradi Unit No. 9	1,781	2.75
Chandrapur Unit No. 9	1,562	2.70
Chandrapur Unit No. 8	2,170	2.70
Adani Power (1320)	8,511	2.66
KAPP	1,050	2.58
CPP	1,977	2.51
Dodson I	56	2.49
Mundra UMPP	5,158	2.46
VSTP IV	2,292	2.36
Dodson II	64	2.29
Pench	130	2.21
SSP	1,200	2.21
KSTPS	4,661	1.76
MSGCL Hydro	4,612	1.55
TAPP 1&2	1,200	1.10
Total PP Excluding NCE	1,00,391	

6.48.4 From the above Table, it will be seen that power purchase from the following sources constitutes the top 5% of the total power purchase, excluding purchase from RE sources. Therefore, “C” has been computed as Rs 4.13/kWh, representing the weighted average power purchase cost of the top 5% at the margin.

**Table 139: Top 5% for computation of ‘C’**

Station	MU	Per Unit Total Cost of Power Purchase (Rs/kWh)
VSTP V	557	4.98
Parli Unit No. 8	451	4.16
Khaperkheda Unit No. 5	3072	4.12
Paras Unit No. 3 and Unit No. 4	939	3.65
<b>Computation of ‘C’ for top 5% Power</b>	<b>5,031</b>	<b>4.13</b>

- 6.48.5 *Average Billing Rate “ T ”*: ABR for each of the consumer categories has been considered in this Order.
- 6.48.6 *System Loss “ L ”*: In line with the methodology adopted in its previous Orders, the Commission considers approved wheeling losses at the voltage level of the consumer category and Transmission Losses as system losses, i.e., “ L ”.
- 6.48.7 Intra-State Transmission Losses have been considered as the sources identified for computation of “ C ” pertain to generation sources connected to the Intra-State network.

**Table 140: Computation of System Losses approved by the Commission**

Particulars	EHV Level	33 kV	22/11 kV	LT Level
Transmission Losses (%)	3.89%	3.89%	3.89%	3.89%
Wheeling Losses LT (%)	0.00%	6.00%	9.00%	12.00%
<b>Total System Losses (%)</b>	<b>3.89%</b>	<b>9.67%</b>	<b>12.55%</b>	<b>15.44%</b>

- 6.48.8 *Wheeling charges “D”* for each of the voltage levels are taken from Table 135, which is provided below.

**Table 141: Wheeling Charges approved by the Commission**

Particulars	EHV Level	33 kV	22/11 kV	LT Level
Wheeling Charges	-	0.15	0.83	1.42

- 6.48.9 *Category-wise CSS computed as per the formula in the MERC (Distribution OA) Regulations, 2014*: The category-wise CSS computed as per the formula specified in the MERC (Distribution OA) Regulations, 2014 is given in the Table below:

**Table 142: Cross-Subsidy Surcharge computation as per MERC (Distribution Open Access) Regulations, 2014**

Consumer Category	T (ABR)	C	WL	TL	L	D	CSS Computed	CSS for Commission's Consideration	Existing effective CSS Order 138 of 2012
	Rs. / kWh		%	%	%	Rs. / kWh			Rs. / kWh
<b>HT Consumers (66 kV and Above)</b>									
<b>HT I: HT - Industry</b>									
HT I (A): HT - Industry (Express Feeder)	8.02	4.13	0.00%	3.89%	3.89%	-	3.73	3.73	1.63
HT I (B): HT - Industry (Non-Express Feeder)	7.48	4.13	0.00%	3.89%	3.89%	-	3.19	3.19	1.20
HT I (C): HT - Seasonal Industry	10.26	4.13	0.00%	3.89%	3.89%	-	5.96	5.96	2.84
<b>HT II: HT - Commercial</b>									
HT II (A): Express Feeder	12.78	4.13	0.00%	3.89%	3.89%	-	8.49	8.49	5.53
HT II (B): Non-Express Feeder	11.77	4.13	0.00%	3.89%	3.89%	-	7.48	7.48	4.91
<b>HT III: HT - Railways</b>	8.46	4.13	0.00%	3.89%	3.89%	-	4.17	4.17	1.76
<b>HT IV: HT - Public Water Works</b>									
HT IV (A): Express Feeder	5.97	4.13	0.00%	3.89%	3.89%	-	1.68	1.68	-
HT IV (B): Non-Express Feeder	6.34	4.13	0.00%	3.89%	3.89%	-	2.05	2.05	-
<b>HT V: HT – Agriculture</b>	3.56	4.13	0.00%	3.89%	3.89%	-	(0.73)	-	-
<b>HT VI: HT - Bulk Supply (Residential)</b>	6.90	4.13	0.00%	3.89%	3.89%	-	2.61	2.61	-
<b>HT VIII (B): HT – Temporary Supply Others (TSO)</b>	16.39	4.13	0.00%	3.89%	3.89%	-	12.10	12.10	-
<b>HT IX: HT - Public Services</b>									
<b>HT IX (A): HT - Public Services - Government</b>									
HT IX (A) (i): Express Feeders	7.74	4.13	0.00%	3.89%	3.89%	-	3.45	3.45	
HT IX (A) (ii): Non-Express Feeders	7.54	4.13	0.00%	3.89%	3.89%	-	3.25	3.25	
<b>HT IX (B) - Public Services - Others</b>									

Consumer Category	T (ABR)	C	WL	TL	L	D	CSS Computed	CSS for Commission's Consideration	Existing effective CSS Order 138 of 2012
	Rs. / kWh		%	%	%	Rs. / kWh			Rs. / kWh
HT IX (B) (i): Express Feeders	9.43	4.13	0.00%	3.89%	3.89%	-	5.14	5.14	3.29
HT IX (B) (ii): Non-Express Feeders	9.35	4.13	0.00%	3.89%	3.89%	-	5.06	5.06	2.73
<b>HT X – Ports</b>	11.32	4.13	0.00%	3.89%	3.89%	-	7.03	7.03	
<b>HT Consumers (33 kV)</b>									
<b>HT I: HT - Industry</b>									
HT I (A): HT - Industry (Express Feeder)	8.02	4.13	6.00%	3.89%	9.67%	0.15	3.34	3.34	1.18
HT I (B): HT - Industry (Non-Express Feeder)	7.48	4.13	6.00%	3.89%	9.67%	0.15	2.80	2.80	0.76
HT I (C ): HT - Seasonal Industry	10.26	4.13	6.00%	3.89%	9.67%	0.15	5.57	5.57	2.39
<b>HT II: HT - Commercial</b>									
HT II (A): Express Feeder	12.78	4.13	6.00%	3.89%	9.67%	0.15	8.10	8.10	5.09
HT II (B): Non-Express Feeder	11.77	4.13	6.00%	3.89%	9.67%	0.15	7.09	7.09	4.47
<b>HT III: HT - Railways</b>	8.46	4.13	6.00%	3.89%	9.67%	0.15	3.78	3.78	1.32
<b>HT IV: HT - Public Water Works</b>									
HT IV (A): Express Feeder	5.97	4.13	6.00%	3.89%	9.67%	0.15	1.29	1.29	-
HT IV (B): Non-Express Feeder	6.34	4.13	6.00%	3.89%	9.67%	0.15	1.66	1.66	-
<b>HT V: HT - Agriculture</b>	3.56	4.13	6.00%	3.89%	9.67%	0.15	(1.12)	-	
<b>HT VI: HT - Bulk Supply (Residential)</b>	6.90	4.13	6.00%	3.89%	9.67%	0.15	2.22	2.22	
<b>HT VIII (B): HT – Temporary Supply Others (TSO)</b>	16.39	4.13	6.00%	3.89%	9.67%	0.15	11.71	11.71	
<b>HT IX: HT - Public Services</b>									
<b>HT IX (A): HT - Public Services - Government</b>									
HT IX (A) (i): Express Feeders	7.74	4.13	6.00%	3.89%	9.67%	0.15	3.06	3.06	
HT IX (A) (ii): Non-Express Feeders	7.54	4.13	6.00%	3.89%	9.67%	0.15	2.86	2.86	
<b>HT IX (B) - Public Services - Others</b>									

Consumer Category	T (ABR)	C	WL	TL	L	D	CSS Computed	CSS for Commission's Consideration	Existing effective CSS Order 138 of 2012
	Rs. / kWh		%	%	%	Rs. / kWh			Rs. / kWh
HT IX (B) (i): Express Feeders	9.43	4.13	6.00%	3.89%	9.67%	0.15	4.75	4.75	2.85
HT IX (B) (ii): Non-Express Feeders	9.35	4.13	6.00%	3.89%	9.67%	0.15	4.67	4.67	2.29
<b>HT X - Ports</b>	11.32	4.13	6.00%	3.89%	9.67%	0.15	6.64	6.64	
<b>HT Consumers (22 / 11 kV)</b>									
<b>HT I: HT - Industry</b>									
HT I (A): HT - Industry (Express Feeder)	8.02	4.13	9.00%	3.89%	12.57%	0.83	2.54	2.54	0.53
HT I (B): HT - Industry (Non-Express Feeder)	7.48	4.13	9.00%	3.89%	12.57%	0.83	1.99	1.99	0.10
HT I (C ): HT - Seasonal Industry	10.26	4.13	9.00%	3.89%	12.57%	0.83	4.77	4.77	1.74
<b>HT II: HT - Commercial</b>									
HT II (A): Express Feeder	12.78	4.13	9.00%	3.89%	12.57%	0.83	7.30	7.30	4.43
HT II (B): Non-Express Feeder	11.77	4.13	9.00%	3.89%	12.57%	0.83	6.29	6.29	3.81
<b>HT III: HT - Railways</b>	8.46	4.13	9.00%	3.89%	12.57%	0.83	2.98	2.98	0.66
<b>HT IV: HT - Public Water Works</b>									
HT IV (A): Express Feeder	5.97	4.13	9.00%	3.89%	12.57%	0.83	0.49	0.49	
HT IV (B): Non-Express Feeder	6.34	4.13	9.00%	3.89%	12.57%	0.83	0.86	0.86	
<b>HT V: HT - Agriculture</b>	3.56	4.13	9.00%	3.89%	12.57%	0.83	(1.92)	-	
<b>HT VIII (B): HT – Temporary Supply Others (TSO)</b>	6.90	4.13	9.00%	3.89%	12.57%	0.83	1.42	1.42	
<b>HT VIII: HT – Temporary Supply</b>	16.39	4.13	9.00%	3.89%	12.57%	0.83	10.91	10.91	
<b>HT IX: HT - Public Services</b>									
<b>HT IX (A): HT - Public Services - Government</b>									
HT IX (A) (i): Express Feeders	7.74	4.13	9.00%	3.89%	12.57%	0.83	2.25	2.25	
HT IX (A) (ii): Non-Express Feeders	7.54	4.13	9.00%	3.89%	12.57%	0.83	2.06	2.06	
<b>HT IX (B) - Public Services - Others</b>									

Consumer Category	T (ABR)	C	WL	TL	L	D	CSS Computed	CSS for Commission's Consideration	Existing effective CSS Order 138 of 2012
	Rs. / kWh		%	%	%	Rs. / kWh			Rs. / kWh
HT IX (B) (i): Express Feeders	9.43	4.13	9.00%	3.89%	12.57%	0.83	3.94	3.94	2.19
HT IX (B) (ii): Non-Express Feeders	9.35	4.13	9.00%	3.89%	12.57%	0.83	3.87	3.87	1.63
<b>HT X - Ports</b>	11.32	4.13	9.00%	3.89%	12.57%	0.83	5.84	5.84	
<b>LT Consumers</b>									
<b>LT I: LT - Residential</b>									
BPL (0-30 Units)	1.39	4.13	12.00%	3.89%	15.47%	1.42	(4.80)	-	
1-100 Units	4.33	4.13	12.00%	3.89%	15.47%	1.42	(1.86)	-	-
101-300 Units	7.75	4.13	12.00%	3.89%	15.47%	1.42	1.56	1.56	-
301-500 Units	10.50	4.13	12.00%	3.89%	15.47%	1.42	4.31	4.31	0.40
501-1000 Units per month	11.87	4.13	12.00%	3.89%	15.47%	1.42	5.68	5.68	1.10
Above 1000 Units per month	12.99	4.13	12.00%	3.89%	15.47%	1.42	6.80	6.80	1.10
<b>LT II: LT - Non-Residential</b>									
<b>LT II (A): 0-20 KW</b>									
LT II (A) (i): 0-200 Units	7.89	4.13	12.00%	3.89%	15.47%	1.42	1.70	1.70	-
LT II (A) (ii): Above 200 Units	10.99	4.13	12.00%	3.89%	15.47%	1.42	4.80	4.80	3.11
<b>LT II (B): &gt;20-50 KW</b>	12.39	4.13	12.00%	3.89%	15.47%	1.42	6.20	6.20	2.33
<b>LT II (C): &gt;50 KW</b>	15.03	4.13	12.00%	3.89%	15.47%	1.42	8.84	8.84	4.84
<b>LT III: LT - Public Water Works (PWW)</b>									
<b>LT III (A): 0-20 KW</b>	3.04	4.13	12.00%	3.89%	15.47%	1.42	(3.16)	-	
<b>LT III (B): &gt; 20 to &lt; 40 KW</b>	4.16	4.13	12.00%	3.89%	15.47%	1.42	(2.03)	-	
<b>LT III (C): &gt;40 kW</b>	5.37	4.13	12.00%	3.89%	15.47%	1.42	(0.82)	-	

Consumer Category	T (ABR)	C	WL	TL	L	D	CSS Computed	CSS for Commission's Consideration	Existing effective CSS Order 138 of 2012
	Rs. / kWh		%	%	%	Rs. / kWh			Rs. / kWh
<b>LT IV – Agriculture</b>									
LT IV(A): LT - Agriculture Un-metered - Pumpsets	3.53	4.13	12.00%	3.89%	15.47%	1.42	(2.66)	-	
LT IV(B): Agriculture Metered - Pumpsets	2.81	4.13	12.00%	3.89%	15.47%	1.42	(3.38)	-	
LT IV (C ): Agriculture Metered - Others	4.17	4.13	12.00%	3.89%	15.47%	1.42	(2.02)	-	
<b>LT V – Industry</b>									
<b>LT V (A): LT - Industry - Power Looms</b>									
LT (V) (A) (i): 0-20 KW	5.60	4.13	12.00%	3.89%	15.47%	1.42	(0.59)	-	-
LT (V) (A) (ii): Above 20 kW	7.31	4.13	12.00%	3.89%	15.47%	1.42	1.12	1.12	0.73
<b>LT V (B): LT - Industry - General</b>									
LT (V) (A) (i): 0-20 KW	5.92	4.13	12.00%	3.89%	15.47%	1.42	(0.28)	-	-
LT (V) (A) (ii): Above 20 kW	8.47	4.13	12.00%	3.89%	15.47%	1.42	2.28	2.28	0.73
<b>LT VI: LT - Street Lights</b>									
LT VI (A): Gram Panchayat A, B & C Class Municipal Council	4.89	4.13	12.00%	3.89%	15.47%	1.42	(1.30)	-	
LT VI (B): Municipal Corporation Area	5.98	4.13	12.00%	3.89%	15.47%	1.42	(0.21)	-	
<b>LT VII: LT - Temporary Supply</b>									
LT VII (A): Temporary Supply Religious (TSR)	4.51	4.13	12.00%	3.89%	15.47%	1.42	(1.68)	-	
LT VII (B): Temporary Supply Others (TSO)	15.66	4.13	12.00%	3.89%	15.47%	1.42	9.47	9.47	7.79
<b>LT VIII: LT - Advertisements and Hoardings</b>	21.40	4.13	12.00%	3.89%	15.47%	1.42	15.21	15.21	15.58
<b>LT IX: LT - Crematorium and Burial Grounds</b>	4.12	4.13	12.00%	3.89%	15.47%	1.42	(2.08)	-	
<b>LT X: LT - Public Services</b>									

Consumer Category	T (ABR)	C	WL	TL	L	D	CSS Computed	CSS for Commission's Consideration	Existing effective CSS Order 138 of 2012
	Rs. / kWh		%	%	%	Rs. / kWh			Rs. / kWh
<b>LT X (A) - Public Services - Government</b>									
LT (X) (A) (i): >20 kW									
0-200 Units	5.59	4.13	12.00%	3.89%	15.47%	1.42	(0.60)	-	
>200 units	6.76	4.13	12.00%	3.89%	15.47%	1.42	0.57	0.57	
LT (X) (A) (ii): >20-50 kW	8.07	4.13	12.00%	3.89%	15.47%	1.42	1.88	1.88	
LT (X) (A) (iii): >50 kW	8.61	4.13	12.00%	3.89%	15.47%	1.42	2.42	2.42	
<b>LT X (B) - Public Services – Others</b>									
LT (X) (A) (i): >20 kW									
0-200 Units	5.97	4.13	12.00%	3.89%	15.47%	1.42	(0.22)	-	-
>200 units	8.14	4.13	12.00%	3.89%	15.47%	1.42	1.95	1.95	0.56
LT (X) (A) (ii): >20-50 kW	8.89	4.13	12.00%	3.89%	15.47%	1.42	2.70	2.70	1.67
LT (X) (A) (iii): >50 kW	9.09	4.13	12.00%	3.89%	15.47%	1.42	2.90	2.90	2.18



- 6.48.10 **Need for change in the formula for determination of CSS:** The Commission observes that the category-wise CSS computed above works out to be very high for most categories, and is significantly higher than the CSS determined by the Commission in Order in Case No. 138 of 2012, which is also shown in the above Table for comparison.
- 6.48.11 As the category-wise tariffs have been determined on the basis of ACoS, the actual loss of cross-subsidy to the Licensee on account of consumers migrating away under OA is the difference between the category-wise ABR and the ACOS. However, the CSS computed in accordance with the formula specified in the Tariff Policy and the Distribution Open Access Regulations results in absurdity, as it works out to be much higher than the actual loss of cross-subsidy to the Licensee. This is a consequence of the interplay between the different values of 'T', 'C', 'D' and 'L' in the formula, and is significantly affected by the value of 'C', which reflects the weighted average cost of power purchase of the top 5% at the margin. In case the marginal rate of power purchase reduces even when the overall average rate of power purchase increases, keeping all other factors the same, the CSS worked out as per the Tariff Policy formula will work out to be higher, though the ACOS would be consequently higher and the actual loss of cross-subsidy would be lower.
- 6.48.12 The weighted average power purchase cost of the top 5% at the margin, i.e. "C", works out to Rs. 4.13/kWh, as against Rs. 5.81/kWh (equivalent to per unit cost of RGPPL) arrived at in Order in Case No. 138 of 2012. Such a significant change in the value of "C" is because of exclusion of the RGPPL generation source, which is no longer considered for Merit Order in FY 2015-16.
- 6.48.13 As the CSS is intended to compensate the Licensee for the loss of cross-subsidy and not result in profit, the Commission is of the view that there is a need to revisit the formula for computation of CSS under the present circumstances. The Distribution OA Regulations provide the following enabling clause"
- "Provided further that the Commission may, if required, revisit the formula and modify the same by general or special Order."*
- 6.48.14 Further, the intention of the CSS is not to block OA or to create hurdles for competition and choice in the electricity sector by artificially keeping the barriers to OA high.
- 6.48.15 In view of all the above considerations, the Commission has decided to revisit the formula for determination of CSS as the difference between the ABR of the respective categories as approved in this Order and the ACoS of MSEDCL for FY 2015-16.
- 6.48.16 The Tariff Policy also stipulates that the CSS should not be so onerous that it eliminates competition, and also that the CSS should be brought down progressively. The relevant extracts of the Tariff Policy are reproduced below:

**"8.5 Cross-Subsidy Surcharge and additional surcharge for open access**

8.5.1 National Electricity Policy lays down that the amount of Cross-Subsidy Surcharge and the additional surcharge to be levied from consumers who are permitted open access should not be so onerous that it eliminates competition which is intended to be fostered in generation and supply of power directly to the consumers through open access.

A consumer who is permitted open access will have to make payment to the generator, the transmission licensee whose transmission systems are used, distribution utility for the wheeling charges and, in addition, the cross subsidy surcharge. The computation of cross subsidy surcharge, therefore, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access. A consumer would avail of open access only if the payment of all the charges leads to a benefit to him. While the interest of distribution licensee needs to be protected it would be essential that this provision of the Act, which requires the open access to be introduced in a time-bound manner, is used to bring about competition in the larger interest of consumers...

*The Cross-Subsidy Surcharge should be brought down progressively and, as far as possible, at a linear rate to a maximum of 20% of its opening level by the year 2010-11..."*

- 6.48.17 Hence, the Commission has decided to create a trajectory for reduction of the CSS over a period of time, in accordance with the stipulations of the Tariff Policy. To start with, the Commission has decided that the CSS for FY 2015-16 shall be levied at the rate of 75% of the CSS determined as the difference between the ABR of the respective categories as approved in this Order, and the ACoS, as shown in Table 143 below. Since voltage level is not a factor in CSS computation under this methodology, there is no need to separately compute the approved CSS for HT consumer categories at different voltage levels (i.e. 66 kV and above, 33 kV and 22 / 11 kV). Thus, the category-wise CSS approved by the Commission for MSEDCL for FY 2015-16 is as shown in the Table below:

**Table 143: Cross-Subsidy Surcharge as approved by the Commission for FY 2015-16**

Consumer Category	ABR	ACoS	CSS = ABR - ACoS	CSS Approved @ 75%
<b>HT Consumers (66 kV and Above / 33 kV / 22/11 kV)</b>				
<b>HT I: HT – Industry</b>				
HT I (A): HT - Industry (Express Feeder)	8.02	6.03	1.99	1.49
HT I (B): HT - Industry (Non-Express Feeder)	7.48	6.03	1.45	1.09
HT I (C): HT - Seasonal Industry	10.26	6.03	4.23	3.17
<b>HT II: HT - Commercial</b>				
HT II (A): Express Feeder	12.78	6.03	6.75	5.07
HT II (B): Non-Express Feeder	11.77	6.03	5.74	4.31
<b>HT III: HT - Railways</b>	8.46	6.03	2.43	1.83
<b>HT IV: HT - Public Water Works</b>				

Consumer Category	ABR	ACoS	CSS = ABR - ACoS	CSS Approved @ 75%
HT IV (A): Express Feeder	5.97	6.03	-	-
HT IV (B): Non-Express Feeder	6.34	6.03	0.31	0.23
<b>HT V: HT - Agriculture</b>	3.56	6.03	-	-
<b>HT VI: HT - Bulk Supply (Residential)</b>	6.90	6.03	0.87	0.66
<b>HT VIII (B): HT – Temporary Supply Others (TSO)</b>	16.39	6.03	10.36	7.77
<b>HT IX: HT - Public Services</b>				
<b>HT IX (A): HT - Public Services - Government</b>				
HT IX (A) (i) Express Feeders	7.74	6.03	1.71	1.28
HT IX (A) (ii) Non-Express Feeders	7.54	6.03	1.51	1.14
<b>HT IX (B): HT - Public Services - Others</b>				
HT IX (B) (i) Express Feeders	9.43	6.03	3.40	2.55
HT IX (B) (ii) Non-Express Feeders	9.35	6.03	3.32	2.49
<b>HT X: HT – Ports</b>	11.32	6.03	5.30	3.97
<b>LT Consumers</b>				
<b>LT I: LT – Residential</b>				
BPL (0-30 Units)	1.39	6.03	-	-
1-100 Units	4.33	6.03	-	-
101-300 Units	7.75	6.03	1.72	1.29
301-500 Units	10.50	6.03	4.47	3.35
501-1000 Units per month	11.87	6.03	5.85	4.38
Above 1000 Units per month	12.99	6.03	6.96	5.22
<b>LT II: LT - Non-Residential</b>				
<b>LT II (A) 0-20 KW</b>				
LT II (A) (i): 0-200 Units	7.89	6.03	1.86	1.39
LT II (A) (ii): Above 200 Units	10.99	6.03	4.96	3.72
<b>LT II (B): &gt;20-50 KW</b>	12.39	6.03	6.36	4.77
<b>LT II (C): &gt;50 KW</b>	15.03	6.03	9.00	6.75
<b>LT III - Public Water Works (PWW)</b>				
LT III (A): 0-20 KW	3.04	6.03	-	-
LT III (B): > 20 to < 40 KW	4.16	6.03	-	-
LT III (C): >40 kW	5.37	6.03	-	-
<b>LT IV – Agriculture</b>				
LT IV(A): LT - Agriculture Un-metered – Pumpsets	3.53	6.03	-	-
LT IV(B): Agriculture Metered - Pumpsets	2.81	6.03	-	-
LT IV (C): Agriculture Metered - Others	4.17	6.03	-	-
<b>LT V – Industry</b>				
<b>LT V (A): LT - Industry - Power Looms</b>				
LT (V) (A) (i): 0-20 KW	5.60	6.03	-	-

Consumer Category	ABR	ACoS	CSS = ABR - ACoS	CSS Approved @ 75%
LT (V) (A) (ii): Above 20 kW	7.31	6.03	1.28	0.96
<b>LT V (B): LT - Industry - General</b>				
LT (V) (A) (i): 0-20 KW	5.92	6.03	-	-
LT (V) (A) (ii): Above 20 kW	8.47	6.03	2.44	1.83
<b>LT VI: LT - Street Lights</b>				
LT VI (A): Gram Panchayat A, B & C Class Municipal Council	4.89	6.03	-	-
LT VI (B): Municipal Corporation Area	5.98	6.03	-	-
<b>LT VII: LT - Temporary Supply</b>				
LT VII (A): Temporary Supply Religious (TSR)	4.51	6.03	-	-
LT VII (B): Temporary Supply Others (TSO)	15.66	6.03	9.63	7.22
<b>LT VIII: LT - Advertisements and Hoardings</b>	21.40	6.03	15.37	11.53
<b>LT IX: LT - Crematorium and Burial Grounds</b>	4.12	6.03	-	-
<b>LT X: LT - Public Services</b>				
<b>LT X (A) - Public Services - Government</b>				
LT (X) (A) (i): >20 kW			-	-
0-200 Units	5.59	6.03	-	-
>200 units	6.76	6.03	0.73	0.55
LT (X) (A) (ii): >20-50 kW	8.07	6.03	2.04	1.53
LT (X) (A) (iii): >50 kW	8.61	6.03	2.58	1.93
<b>LT X (B) - Public Services - Others</b>				
LT (X) (B) (i): >20 kW				
0-200 Units	5.97	6.03	-	-
>200 units	8.14	6.03	2.11	1.58
LT (X) (B) (ii): >20-50 kW	8.89	6.03	2.86	2.15
LT (X) (B) (iii): >50 kW	9.09	6.03	3.06	2.30

6.48.18 The CSS determined as above for all the OA consumers would be applicable as per the Proviso to Section 42 (2) of the EA, 2003. The CSS shall be applicable to all consumers in the Licence area of MSEDCL who opt for OA under the MERC (Distribution OA) Regulations, 2014.

6.48.19 The CSS shall be applicable for existing as well as new OA consumers with effect from 1 June, 2015.

6.48.20 The Commission notes that the third proviso of Regulation 17.3 of MERC (Distribution OA) Regulations, 2014 stipulates as under:

*“Provided further that the concessions to the applicable surcharge, if any, in case the Open Access consumer purchases power from a Renewable source of energy, shall be stipulated by the Commission from time to time.”*

- 6.48.21 Accordingly, the Commission rules that the CSS for OA consumers wheeling power from renewable sources of energy shall be applicable at the rate of 25% of the approved CSS as set out in Table 143 for the respective categories.

#### 6.49 Incentives and Disincentives

- 6.49.1 **Power Factor Incentive** - (Applicable for HT I, HT II, HT IV, HT V, HT VI and HT IX, HT X, HT XI categories, as well as LT II (B), LT II (C), LT III, LT V (B), LT X (B) and LT X (C) categories).

Whenever the average Power Factor is more than 0.95, an incentive shall be given at the rate of the following percentages of the amount of the monthly bill, including Energy Charges, Reliability Charges (if any), FAC, and Fixed/Demand Charges, but excluding Taxes and Duties.

**Table 144: Power Factor Incentive approved for FY 2015-16**

Sl. No.	Range of Power Factor	Power Factor Level	Incentive
1	0.951 to 0.954	0.95	0%
2	0.955 to 0.964	0.96	1%
3	0.965 to 0.974	0.97	2%
4	0.975 to 0.984	0.98	3%
5	0.985 to 0.994	0.99	5%
6	0.995 to 1.000	1.00	7%

*Note: PF is to be measured/computed up to 3 decimals, after universal rounding off*

- 6.49.2 **Power Factor Penalty**- (Applicable for HT I, HT II, HT IV, HT V, HT VI and HT IX, HT X, HT XI categories, as well as LT II (B), LT II (C), LT III, LT V (B), LT X (B) and LT X (C) categories).

Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of the following percentages of the amount of the monthly bill, including Energy Charges, Reliability Charges (if any), FAC, and Fixed/Demand Charges, but excluding Taxes and Duties.

**Table 145: Power Factor Penalty approved for FY 2015-16**

Sl. No.	Range of Power Factor	Power Factor Level	Incentive
1	0.895 to 0.900	0.90	0%
2	0.885 to 0.894	0.89	2%
3	0.875 to 0.884	0.88	3%
4	0.865 to 0.874	0.87	4%
5	0.855 to 0.864	0.86	5%
6	0.845 to 0.854	0.85	6%
7	0.835 to 0.844	0.84	7%
8	0.825 to 0.834	0.83	8%

Sl. No.	Range of Power Factor	Power Factor Level	Incentive
9	0.815 to 0.824	0.82	9%
10	0.805 to 0.814	0.81	10%
...	...	...	...

*Note: PF is to be measured/computed up to 3 decimals, after universal rounding off*

## **6.50 Prompt Payment Discount**

- 6.50.1 A prompt payment discount of one percent on the monthly bill (excluding Taxes and Duties) shall be provided to consumers if the bills are paid within 7 days from their date of issue, or within 5 days of their receipt, whichever is later.

## **6.51 Delayed Payment Charges**

- 6.51.1 In case the electricity bills are not paid within the due date mentioned in the bill, DPC of 2% on the total amount of the electricity bill (including Taxes and Duties) shall be levied. However, if a consumer makes part payment of a bill within the due date, then the DPC shall apply only to the amount which was not paid within the due date. For the purpose of computation of the time limit for payment of bills, "the day of presentation of bill" or "the date of the bill" or "the date of issue of the bill", etc. as the case may be, will not be excluded.

## **6.52 Rate of Interest on Arrears**

- 6.52.1 The rate of interest chargeable on payment of arrears will be as given below.

**Table 146: Rate of Interest on Arrears approved for FY 2015-16**

Sl. No.	Delay in Payment (Months)	Interest Rate per Annum (%)
1	Payment after due date up to 3 months (0 - 3)	12%
2	Payment made after 3 months and before 6 months (3 - 6)	15%
3	Payment made after 6 months (> 6)	18%

## **6.53 Load Factor Incentive**

- 6.53.1 Consumers having a Load Factor over 75% and upto 85% will be entitled to 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 over 85% will be entitled to 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 for that consumer. This incentive is limited to HT I, HT II, HT IX, and HT X categories only. Further, the Load Factor rebate will be available only if

the consumer has no arrears with MSEDCL, and payment is made within seven days from the date of the bill. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by MSEDCL, and such payment is being made as scheduled.

6.53.2 The Load Factor has been defined as below:

$$\text{Load Factor} = \frac{\text{Consumption during the month in MU}}{\text{Maximum Consumption Possible during the month in MU}}$$

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor x (Total no. of hrs during the month less planned load shedding hours\*)

\* - Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme.

6.53.3 In case the Billing Demand exceeds the Contract Demand in any particular month, then the Load Factor Incentive will not be payable in that month. (The Billing Demand definition excludes the demand recorded during the non-peak hours, i.e. 22:00 hrs to 06:00 hrs. Even if the Maximum Demand exceeds the Contract Demand in that duration, the Load Factor Incentive would be applicable. However, the consumer would have to pay the penal charges for exceeding the Contract Demand.).

## **6.54 EHV Supply Rebate**

6.54.1 Consumers availing supply at Extra High Voltage (66 kV and above) will be given a rebate of 3% on Energy Charges. The EHV supply rebate will be available only if the consumer has no arrears with MSEDCL. However, the rebate will be applicable to consumers where payment of arrears in installments has been granted by MSEDCL, and is being made as scheduled.

## **6.55 APPLICABILITY OF ORDER**

6.55.1 This MYT Tariff Order for MSEDCL for the Control Period from FY 2013-14 to FY 2015-16 shall come into force with effect from 1 June, 2015.

6.55.2 For the purpose of tariff determination under this Order, the Commission has not considered the impact of the Order in Case No. 122 of 2014 pertaining to MSPGCL's final true up for FY 2012-13. In that Order, the Commission has allowed recovery of Rs. 1,240.94 Crore in six equal instalments, and MSEDCL was allowed to pass it on to consumers as per the provisions of MYT Regulations. Its inclusion in the present Order would have resulted in spreading out the recovery from consumers over the full period of FY 2015-16 as a part of tariff, while MSEDCL is required to pay MSPGCL in six monthly installments from April, 2015. Moreover, part of this amount would already have been recovered during

April and May, 2015. Therefore, the Commission has considered it appropriate to continue the recovery of the balance amount as per the methodology stipulated in its Order in Case No. 122 of 2014.



## **7 SUMMARY OF RULINGS AND DIRECTIVES**

The Commission under this Order has issued number of Rulings and Directives, which are summarised below:

### **7.1 Energy Sales**

- 7.1.1 For FY 2013-14, the Commission has approved total sales of 85,631 MU based on the actual sales reported under MSEDCL's Audited Annual Accounts for the year.
- 7.1.2 For FY 2014-15, the Commission has approved total sales of 86,609 MU on provisional basis as against MSEDCL's projection of 87,189 MU.
- 7.1.3 For FY 2015-16, the Commission approves total sales of 92,216 MU as against the projection of 93,316 MU by MSEDCL. Taking note of the fact that Aurangabad DF has been surrendered and MSEDCL has taken over the operations of the area w.e.f November 2014, the Commission has included category-wise sales projections pertaining to Aurangabad DF for FY 2015-16 as part of overall sales projections for MSEDCL.
- 7.1.4 The Commission directs MSEDCL to submit in the next tariff Petition, the reasons for such increase in agriculture consumption along with Circle-wise number of agriculture consumers (metered/un-metered), connected load (metered/un-metered), assessment of agriculture consumption Index, and agriculture sales (metered/un-metered) for FY 2013-14 and FY 2014-15.
- 7.1.5 Further, the Commission directs MSEDCL to complete 100% metering within a period of 3 years. MSEDCL should modify its current metering plan accordingly, and submit the detailed circle-wise revised metering plan for agriculture consumers within 60 days from date of this Order.
- 7.1.6 For assessment of Index for un-metered agriculture consumption, the Commission opines that assessment by Third-party independent Energy Audit Agency would ensure independence and transparency required for such exercise. Hence, the Commission will appoint a third-party independent agency for verification of agricultural sales and to determine sub-Division-wise weighted average consumption Index for un-metered agriculture connection.

### **7.2 Distribution Losses**

- 7.2.1 For FY 2013-14, the Commission has approved 14.00% as distribution loss, as reported by MSEDCL, which is lower as compared to target loss of 15.03% as per Business Plan Order in Case No. 134 of 2012.
- 7.2.2 For FY 2014-15 and FY 2015-16, the Commission has approved distribution losses at 13.75% and 13.50% respectively, as projected by MSEDCL, which is lower as

compared to target distribution losses of 14.53% and 14.03% for respective financial years, as per Business Plan Order in Case No. 134 of 2012.

### **7.3 Energy Balance**

- 7.3.1 For FY 2013-14, the Commission has approved total power purchase quantum of 1,05,145 MU , as submitted by MSEDCL.
- 7.3.2 For FY 2014-15 and FY 2015-16, the Commission has adopted the bottom up approach with grossing up of approved sales by approved loss levels (viz. Distribution Loss, Intra-State Transmission Loss and Inter-State Transmission Loss) to arrive at Energy Input requirement.
- 7.3.3 For FY 2014-15, the Commission has approved total Energy Input requirement of 1,05,945 MU including 651 MU of surplus energy for trading, as against MSEDCL's projection of Energy Input requirement of 1,14,448 MU including projection of 6,500 MU of surplus energy for trading.
- 7.3.4 For FY 2015-16, the Commission approves total Energy Input requirement of 1,11,609 MU with Nil surplus energy for trading, as against MSEDCL's projection of Energy Input requirement of 1,29,669 MU including projection of 13,200 MU of surplus energy for trading.

### **7.4 Power Purchase**

- 7.4.1 For FY 2013-14, the Commission has approved the actual power purchase expense of Rs. 33,922 Crore as verified with MSEDCL's Audited Annual Accounts for FY 2013-14.
- 7.4.2 For FY 2014-15, the Commission has provisionally approved total power purchase cost of Rs. 39,694 Crore for approved power purchase quantum of 1,05,945 MU at per unit rate of Rs 3.75/kWh, as against MSEDCL's projection of Rs. 42,517 Crore.
- 7.4.3 For approving power purchase quantum and cost for FY 2015-16, the Commission has adopted two step approach as outlined below.
- **Step-1:** Station-wise analysis of projection of Quantum and Rates for FY 2015-16 as against projections made by MSEDCL.
  - **Step-2:** Approval of Station-wise Quantum and Cost based on Merit Order Despatch principles for FY 2015-16 and approval of total power purchase quantum and cost for FY 2015-16.
- 7.4.4 For FY 2015-16, the Commission approves total power purchase cost of Rs 41,249 Crore for approved purchase quantum of 1,11,609 MU at per unit rate of Rs 3.70 /kWh, as against MSEDCL's projection of Rs. 45,085 Crore for projected power purchase quantum of 1,29,669 MU at per unit rate of 3.48 Rs/kWh. The

Commission has allowed the Fixed Charges for various generating Stations/ sources for FY 2015-16 irrespective of the fact that energy generation and variable cost from all sources may not have been considered due to MoD principles adopted by the Commission, upon necessary prudence check and analysis undertaken by the Commission.

- 7.4.5 For short-term power procurement, the Commission approves a ceiling rate of Rs. 4.00 per kWh for such short-term power procurement for FY 2015-16, if required and subject to the conditions outlined under para 3.8.40. MSEDCL has not projected any short-term power purchase for FY 2015-16. However, the Commission will consider the short-term power purchase, subject to prudence check at the time of True up at the end of the Control Period.

## **7.5 Transmission Charges and MSLDC Charges**

- 7.5.1 For FY 2013-14, the Commission has approved Intra-State Transmission Charges and MSLDC Charges of Rs. 5,604 Crore, as claimed by MSEDCL, based on Commission's earlier Orders in the matter.
- 7.5.2 For FY 2014-15, the Commission has approved Intra-State Transmission Charges and MSLDC Charges of Rs. 5,490 Crore, as claimed by MSEDCL, based on Commission's earlier Orders in the matter.
- 7.5.3 For FY 2015-16, the Commission has approved Intra-State Transmission Charges and MSLDC Charges of Rs. 3,627 Crore, based on the Intra-State Tariff Order for FY 2015-16 in Case No. 57 of 2015, and the latest approved MSLDC budget in Case No. 178 of 2013, as against MSEDCL's claim of Rs. 6,320 Crore.

## **7.6 Operation and Maintenance (O&M) Expenses**

- 7.6.1 For FY 2013-14, the Commission has approved O&M Expense of Rs. 5,404 Crore, based on the O&M norms specified under MYT Regulations, as against MSEDCL's submission of Rs. 5,601 Crore (on normative basis) and actual O&M Expenses of Rs. 5,320 Crore.
- 7.6.2 Further, considering O&M Expense as a controllable parameter, the Commission has treated the variation in the actual O&M Expense vis-a-vis normative O&M Expense for FY 2013-14, as efficiency gain and shared the same among MSEDCL and consumers in accordance with Regulation 14 of the MYT Regulations.
- 7.6.3 For FY 2014-15, the Commission has approved O&M Expense of Rs. 5,957 Crore, based on the O&M norms specified under MYT Regulations, as against MSEDCL's projection of Rs. 6,289 Crore.
- 7.6.4 For FY 2015-16, the Commission approves O&M Expense of Rs. 6,712 Crore based on the O&M norms specified under MYT Regulations, as against MSEDCL's projection of Rs. 7,123 Crore.

## **7.7 Interest on Working Capital and Security Deposit**

- 7.7.1 For FY 2013-14, the Commission has approved IoWC (IoWC) and interest on Security Deposit for Supply Business of Rs. 378 Crore and for Wires Business of Rs. 219 Crore, based on the norms specified under MYT Regulations, as against MSEDCL's submission of Rs. 453 Crore and Rs. 263 Crore for supply and Wires Businesses respectively.
- 7.7.2 Further, considering IoWC as a controllable parameter, the Commission has treated the variation in the actual IoWC expense vis-a-vis normative IoWC expense for FY 2013-14, as efficiency loss and shared the same among MSEDCL and consumers in accordance with the MYT Regulations.
- 7.7.3 For FY 2014-15, the Commission has approved IoWC and interest on Security Deposit for Supply Business of Rs. 486 Crore and for Wires Business of Rs. 242 Crore, based on the norms specified under MYT Regulations, as against MSEDCL's submission of Rs. 564 Crore and Rs. 309 Crore for supply and Wires Businesses respectively.
- 7.7.4 For FY 2015-16, the Commission approves IoWC and interest on Security Deposit for Supply Business of Rs. 520 Crore and for Wires Business of Rs. 268 Crore, based on the norms specified under MYT Regulations, as against MSEDCL's submission of Rs. 617 Crore and Rs. 306 Crore for supply and Wires Businesses respectively.

## **7.8 Capitalisation**

- 7.8.1 For FY 2013-14, the Commission has approved capitalisation of Rs. 4,531 Crore, as against MSEDCL's submission of Rs. 4,573 Crore.
- 7.8.2 For FY 2014-15, the Commission has approved capitalisation of Rs. 4,072 Crore, as against MSEDCL's projection of Rs. 4,115 Crore.
- 7.8.3 For FY 2015-16, the Commission approves capitalisation of Rs. 3,534 Crore, as against MSEDCL's projection of Rs. 3,594 Crore.
- 7.8.4 The Commission has disallowed capitalisation towards schemes for which no DPR were submitted. As regards schemes which have been capitalised in excess of the in-principle approved cost, 50% of IDC towards such excess capitalisation have been disallowed for respective schemes in respective years.
- 7.8.5 Upon scrutiny of CBA report for the 'Infrastructure Work' schemes capitalised during FY 2013-14, the Commission observes that the loss reduction targets have not been achieved in 21 Divisions. Hence, the Commission directs MSEDCL to submit detailed justification for non-achievement of distribution loss reduction target as was envisaged through implementation of these 'Infrastructure Work'

schemes in these Divisions along with its truing up Petition at the end of the Control Period.

## **7.9 Depreciation**

- 7.9.1 For FY 2013-14, the Commission has approved a depreciation of Rs. 1,611 Crore, as against MSEDCL's submission of Rs. 1,859 Crore.
- 7.9.2 For FY 2014-15, the Commission has approved a depreciation of Rs. 1,940 Crore, as against MSEDCL's projection of Rs. 2,088 Crore.
- 7.9.3 For FY 2015-16, the Commission approves a depreciation of Rs. 2,134 Crore, as against MSEDCL's projection of Rs. 2,289 Crore.

## **7.10 Interest on Debt**

- 7.10.1 For FY 2013-14, the Commission has approved Interest on Debt of Rs. 1,469 Crore, as against MSEDCL's submission of Rs. 1,438 Crore.
- 7.10.2 For FY 2014-15, the Commission has approved Interest on Debt of Rs. 1,591 Crore, as against MSEDCL's projection of Rs. 1,446 Crore.
- 7.10.3 For FY 2015-16, the Commission has approved Interest on Debt of Rs. 1,680 Crore, as against MSEDCL's projection of Rs. 1,501 Crore.
- 7.10.4 While approving the funding plan for the capitalised schemes, the Commission has treated the equity contribution in excess of 30% of the capital cost as normative loan in accordance with Regulation 30 of MYT Regulations

## **7.11 Other Finance Charges**

- 7.11.1 For FY 2013-14, the Commission has approved Other Finance Charges of Rs. 36 Crore, as against MSEDCL's submission of Rs. 412 Crore.
- 7.11.2 For FY 2014-15, the Commission has approved Other Finance Charges of Rs. 38 Crore, as against MSEDCL's submission of Rs. 1,571 Crore.
- 7.11.3 For FY 2015-16, the Commission approves Other Finance Charges of Rs. 39 Crore, same as submitted by MSEDCL.
- 7.11.4 The Commission has disallowed MSEDCL's claim towards DPC to suppliers/contractors amounting to Rs 376 Crore during FY 2013-14 and Rs 1532 Crore during FY 2014-15.

## **7.12 Return on Equity**

- 7.12.1 For FY 2013-14, the Commission has approved a RoE for Supply Business of Rs. 142 Crore and a RoE for Wires Business of Rs. 1,133 Crore, as against MSEDCL's

submission of Rs. 168 Crore and Rs. 1,349 Crore for supply and Wires Businesses respectively.

7.12.2 For FY 2014-15, the Commission has approved a RoE for Supply Business of Rs. 157 Crore and a RoE for Wires Business of Rs. 1,255 Crore, as against MSEDCL's projection of Rs. 184 Crore and Rs. 1,481 Crore for supply and Wires Businesses respectively.

7.12.3 For FY 2015-16, the Commission approves RoE for Supply Business of Rs. 171 Crore and a RoE for Wires Business of Rs. 1,359 Crore, as against MSEDCL's projection of Rs. 197 Crore and Rs. 1,587 Crore for supply and Wires Businesses respectively.

### **7.13 Provision for Bad Debts**

7.13.1 For FY 2013-14, the Commission has approved a Provision for Bad Debts for Supply Business of Rs. 189 Crore and a Provision for Bad Debts for Wires Business of Rs. 21 Crore, as against MSEDCL's submission of Rs. 317 Crore and Rs. 35 Crore for supply and Wires Businesses respectively.

7.13.2 For FY 2014-15, the Commission has approved a Provision for Bad Debts for Supply Business of Rs. 189 Crore and a Provision for Bad Debts for Wires Business of Rs. 21 Crore, as against MSEDCL's projection of Rs. 317 Crore and Rs. 35 Crore for supply and Wires Businesses respectively.

7.13.3 For FY 2015-16, the Commission approves Provision for Bad Debts for Supply Business of Rs. 189 Crore and a Provision for Bad Debts for Wires Business of Rs. 21 Crore, as against MSEDCL's projection of Rs. 317 Crore and Rs. 35 Crore for supply and Wires Businesses respectively.

### **7.14 Contribution towards Contingency Reserve**

7.14.1 For FY 2014-15, the Commission has not considered Contribution towards Contingency Reserve of, as against MSEDCL's submission of Rs. 95 Crore.

7.14.2 For FY 2015-16, the Commission approves Contribution towards Contingency Reserve of Rs. 101 Crore, as against MSEDCL's submission of Rs. 105 Crore.

7.14.3 The Commission directs MSEDCL to make investments towards Contingency Reserve for FY 2014-15 before expiry of the Window of six months from the close of FY 2014-15 in accordance with provisions under MYT Regulations.

### **7.15 Others – Income Tax, Other Expenses, Incentives and Discounts, Prior Period Expenses, DSM Expenses, RLC Refunds**

#### **Income Tax**

- 7.15.1 For FY 2013-14, the Commission has approved Income Tax of Rs. 103.19 Crore, as against MSEDCL's submission of Rs. 103.15 Crore.
- 7.15.2 For FY 2014-15, the Commission has approved Income Tax of Rs. 0.04 Crore, as against MSEDCL's projection of Rs. 103 Crore.
- 7.15.3 For FY 2015-16, the Commission approves Income Tax of Rs. 0.04 Crore, as against MSEDCL's projection of Rs. 103 Crore.

**Other Expenses**

- 7.15.4 For FY 2013-14, the Commission has approved Other Expenses of Rs. 89 Crore, as against MSEDCL's submission of Rs 256 Crore. The Commission has disallowed cost of write-off of DPC towards Abhay Yojana as claimed by MSEDCL.
- 7.15.5 For FY 2014-15, the Commission has approved Other Expenses of Rs. 20 Crore, as against MSEDCL's projection of Rs. 93 Crore. The Commission has not considered loss on obsolescence of fixed assets as projected by MSEDCL. The same would be considered on actual at the time of true up subject to prudence check.
- 7.15.6 For FY 2015-16, the Commission approves Other Expenses of Rs. 21 Crore, as against MSEDCL's projection of Rs. 98 Crore. The Commission has not considered loss on obsolescence of fixed assets as projected by MSEDCL. The same would be considered on actual at the time of true up subject to prudence check.

**Incentives and Discounts**

- 7.15.7 For FY 2013-14, the Commission has approved Incentives and Discounts of Rs. 219 Crore, same as claimed by MSEDCL.
- 7.15.8 For FY 2014-15, the Commission has approved Incentives and Discounts of Rs. 219 Crore, same as projected by MSEDCL.
- 7.15.9 For FY 2015-16, the Commission approves Incentives and Discounts of Rs. 219 Crore, same as projected by MSEDCL.

**Prior Period Expenses**

- 7.15.10 For FY 2013-14, the Commission has approved Prior Period Expenses of Rs. 272 Crore, as against MSEDCL's submission of Rs. 739 Crore.

**DSM Expenses**

- 7.15.11 For FY 2013-14, the Commission has approved DSM expenses of Rs. 1 Crore as revenue expenditure as against MSEDCL's projection to capitalise the same.
- 7.15.12 For FY 2014-15, the Commission has approved DSM expenses of Rs. 8 Crore as revenue expenditure as against MSEDCL's projection to capitalise the same.

**RLC Refunds**

- 7.15.13 For FY 2013-14, the Commission has approved RLC Refund of Rs. 402 Crore, same claimed by MSEDCL.
- 7.15.14 For FY 2014-15, the Commission has approved RLC Refund of Rs. 38 Crore, as against MSEDCL's submission of Rs. 488 Crore.
- 7.15.15 For FY 2015-16, the Commission approves balance amount of RLC refund of Rs. 450 Crore.

**7.16 Non-Tariff Income, Income from Wheeling Charges, Income from Open Access Charges, Income from Trading Surplus, Deemed Revenue on account of change of category**

**Non-Tariff Income**

- 7.16.1 For FY 2013-14, the Commission has approved Non-Tariff Income of Rs. 1,640 Crore, same as claimed by MSEDCL.
- 7.16.2 For FY 2014-15, the Commission has approved Non-Tariff Income of Rs. 1,761 Crore as against MSEDCL's submission of Rs. 1,722 Crore.
- 7.16.3 For FY 2015-16, the Commission approves Non-Tariff Income of Rs. 1,847 Crore, same as projected by MSEDCL, as against MSEDCL's submission of Rs. 1,807 Crore.

**Income from Wheeling Charges**

- 7.16.4 For FY 2013-14, the Commission has approved Income from Wheeling Charges of Rs. 19 Crore, same as claimed by MSEDCL.
- 7.16.5 For FY 2014-15, the Commission has approved Income from Wheeling Charges of Rs. 20 Crore, same as projected by MSEDCL.
- 7.16.6 For FY 2015-16, the Commission approves Income from Wheeling Charges of Rs. 21 Crore, same as projected by MSEDCL.

**Income from OA Charges**

- 7.16.7 For FY 2013-14, the Commission has approved Income from OA Charges of Rs. 404 Crore, same as claimed by MSEDCL.
- 7.16.8 For FY 2014-15, the Commission has approved Income from OA Charges of Rs. 296 Crore, as against MSEDCL's projection of Rs. 424 Crore.
- 7.16.9 For FY 2015-16, the Commission approves Income from OA Charges of Rs. 311 Crore, as against MSEDCL's projection of Rs. 445 Crore.

**Income from Trading Surplus**

- 7.16.10 For FY 2013-14, the Commission has approved Income from Trading Surplus of Rs. 98 Crore, same as claimed by MSEDCL.



- 7.16.11 For FY 2014-15, the Commission has approved Income from Trading Surplus of Rs. 180 Crore, as against MSEDCL's projection of Rs. 2,339 Crore.
- 7.16.12 For FY 2015-16, the Commission has not approved any Income from Trading Surplus, as against MSEDCL's projection of Rs. 4,590 Crore.

**Deemed Revenue on account of change of category**

- 7.16.13 For FY 2013-14, the Commission has approved deemed revenue on account of change of category of Rs. 85 Crore.
- 7.16.14 For FY 2014-15, the Commission approves deemed revenue on account of change of category of Rs. 102 Crore.

**7.17 Aggregate Revenue Requirement (ARR), Wires, Supply and Combined**

- 7.17.1 The Commission has approved Supply ARR of Rs. 41,357 Crore, Rs. 46,642 and Rs. 47,111 Crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16 as against MSEDCL's submission of Rs. 41,641 Crore, Rs. 48,803 and Rs. 53,021 Crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16.
- 7.17.2 The Commission has approved Wires ARR of Rs. 7,722 Crore, Rs. 8,528 and Rs. 9,502 Crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16 as against MSEDCL's submission of Rs. 9,157 Crore, Rs. 10,998 and Rs. 10,671 Crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16.
- 7.17.3 The Commission has approved a combined ARR (supply+Wires) of Rs. 49,078 Crore, Rs. 55,171 and Rs. 56,613 Crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16 as against MSEDCL's submission of Rs. 50,798 Crore, Rs. 59,800 and Rs. 63,692 Crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16.

**7.18 Revenue from Sale of Power**

- 7.18.1 For FY 2013-14, the Commission has approved Revenue from Sale of Power of Rs. 50,961 Crore, same as claimed by MSEDCL.
- 7.18.2 For FY 2014-15, the Commission has approved Revenue from Sale of Power of Rs. 55,259 Crore, as against MSEDCL's projection of Rs. 54,020 Crore.
- 7.18.3 For FY 2015-16, the Commission approves Revenue from Sale of Power of Rs. 58,978 Crore, as against MSEDCL's projection of Rs. 59,419 Crore.

**7.19 Additional Claims**

- 7.19.1 The Commission has approved additional claim of Rs. 1,639 Crore along with carrying cost towards recovery of net Revenue Gap of truing up of FY 2011-12 and

- FY 2012-13 as earlier approved under Order in Case No. 38 of 2014 dated 11 June, 2014.
- 7.19.2 In pursuance of the Commission's earlier directions in Case No. 105 of 2013, the Commission has approved the amount of Rs. 83 Crore as claimed by MSEDCL towards refund of difference in tariff as part of the additional claim to be recovered during the Control Period.
- 7.19.3 The Commission has approved Rs 54 Crore as part of the additional claim made by MSEDCL towards impact of approved capex related expenses for FY 2007-08.
- 7.19.4 The Commission has approved Rs 77 Crore as part of the additional claim made by MSEDCL towards income tax for FY 2011-12 and FY 2012-13.
- 7.19.5 The Commission has considered the impact of MSPGCL Order in Case No. 201 of 2014 amounting to Rs. 1197.67 Crore in this MYT Order. In addition, the Commission has undertaken the Truing up for FY 2013-14 and FY 2014-15 for MSPGCL amounting to (-) minus Rs 827.44 Crore towards Fixed Charges and amount of (-) minus Rs 973.29 Crore towards late payment surcharge with holding cost, as approved under APR Order for MSPGCL (Case No. 15 of 2015). Thus, the Commission has approved the total impact of Case No. 201 of 2014 and Case No. 15 of 2015 of surplus of Rs. 618 Crore.
- 7.19.6 The Commission has approved Rs. 4 Crore as net impact of carrying cost and holding cost considering the deferred recovery as well surplus amount held by MSEDCL.

## 7.20 Revenue Gap / (Surplus)

- 7.20.1 As compared to MSEDCL's projection of Revenue Gap of Rs. 4,717 Crore, the Commission has approved revenue surplus of Rs 3,376 Crore, leading to overall tariff reduction of 5.72% as compared to tariff prevalent at the time of filing of the Petition (February 2015), and the same translates to reduction of 2.44% as compared to tariff prevalent at the beginning of FY 2015-16 (i.e. April 2015).
- 7.20.2 Summary of total Revenue Gap as projected by MSEDCL and as approved by the Commission is as follows:

**Table 147: Total Revenue Gap / (Surplus) (Rs Crore)**

Particulars	MSEDCL Submission	Approved by the Commission
Revenue Gap for FY 2013-14	(261)	(1,981)
Revenue Gap for FY 2014-15	3,442	(269)
Revenue Gap for FY 2015-16	(316)	(2,365)
Balance Gap in Final True Up for FY 2011-12 and FY 2012-13	1,639	1,639
Impact of ATE Judgment on Capex Related Expenses	54	54

Particulars	MSEDCL Submission	Approved by the Commission
Refund as per MERC Order (Case No. 105 of 2013)	83	83
Income Tax Disallowed in Case No. 38 of 2014	77	77
Impact of MSPGCL recoveries		(618)
Carrying cost on deferred recoveries		4
<b>Total Revenue Gap of MSEDCL</b>	<b>4,717</b>	<b>(3,376)</b>

## 7.21 Average Cost of Supply

7.21.1 For FY 2015-16, the Commission has approved an ACoS of Rs. 6.03/kWh as against MSEDCL's projection of Rs. 6.87/kWh.

## 7.22 Total Revenue Requirement for FY 2015-16

7.22.1 The Commission has determined the total revenue requirement to be recovered through the Tariff of FY 2015-16 as Rs. 55,602 Crore, which indicates that there will be a decrease the Tariffs by around 5.72% as compared to tariff prevalent at the time of filing of the Petition (February 2015) and the same translates to reduction of 2.44% as compared to tariff prevalent at the beginning of FY 2015-16 (i.e. April 2015).

## 7.23 Wheeling Charges, Wheeling Losses and CSS for Open Access Consumers

7.23.1 For FY 2015-16, the Commission has approved Wheeling Charges for 33 kV, 22/11 kV and LT Level OA consumers at Rs. 0.15/kWh, Rs. 0.83/kWh and Rs. 1.42/kWh respectively, as against MSEDCL's projection of Rs. 0.22/kWh, Rs. 1.23/kWh and Rs. 2.11/kWh for respective voltage levels.

7.23.2 For FY 2015-16, the Commission has also approved Wheeling Losses for 33 kV, 22/11 kV and LT voltage Levels at 6.00%, 9.00% and 12.00%, as submitted by MSEDCL.

7.23.3 For the reasons elaborated under Paragraph 6.48 of the Order and in pursuance of the MERC (Distribution Open Access) Regulations, 2014, the Commission has decided revisit the formula for determination of CSS. Categorywise CSS approved by the Commission is covered in Table 143 of this Order. Further, the Commission rules that the CSS for OA Consumers purchasing power from renewable sources of energy shall be applicable at the rate of 25% of the approved CSS as outlined in Table 143 for respective category.

7.23.4 The Commission decides not to consider the request of MSEDCL to levy Additional Surcharge on OA consumers in this Order.

## **7.24 Tariff Philosophy, Tariff Design, Recategorisation and related issues**

- 7.24.1 In pursuance of the main objects outlined under Preamble to the Electricity Act 2003, the Commission through the present Order endeavours to promote competition, to protect the interest of consumers, while ensuring reliable and appropriately priced supply of electricity to all areas. The Commission observes that as per the scheme of the Act it is the duty of the Commission to maintain healthy balance between the interest of Utilities and the reasonableness of the cost of power being supplied to consumers.
- 7.24.2 The Commission in passing the present Order has endeavoured to ensure that while industries and commerce are to be promoted, the same is not at the cost of providing continuous supply to lowest strata of the society at a reasonable cost. Tariff Philosophy followed by the Commission in this Order seeks to ensure that there is regulatory consistency for all participants and reasonable return for the Licensee.
- 7.24.3 In general, the movement of tariffs towards the ACoS has been maintained such that inter-class cross-subsidy is reduced over the period. The Commission has also tried to ensure that even the intra-class cross-subsidy, i.e., the cross-subsidy provided by consumers in other slabs within the same category is reduced, by reducing the difference between the highest and lowest slab rates. The applicability of Tariff for different consumer categories has been stipulated in the approved Tariff Schedule, which is annexed as a part of this Order (**Annexure II**).
- 7.24.4 **Reduction in Tariff for Industry and rationalisation of ToD:** The Commission has taken note of views expressed by Industries that Tariff for industries (HT and LT) are higher in Maharashtra in comparison with neighbouring States. Price of electricity plays crucial role for competitiveness of industry. With significant increase in availability of power in the State and with projected revenue surplus, the Commission has strived to reduce the Energy Charges for industry with marginal increase in Fixed Charges. Besides, the Commission has ensured that the benefit of reduction in ToD rebate during off-peak hours is used to reduce energy charges across the same categories.
- 7.24.5 **Revision in Fixed Charges:** The Commission has allowed increase in Fixed Charges as prayed by MSEDCL.
- 7.24.6 **Continuous and non-Continuous categories:** As against MSEDCL proposal of merging Continuous and non-Continuous categories, the Commission has decided to continue with Continuous and Non-continuous category separately, for the time being, with reduction in the tariff gap between the two categories. In this regard, the Commission, further clarifies that the consumer getting supply on express Feeder may exercise his choice between continuous and non-continuous supply anytime during the financial year but only once in the financial year with one month prior notice.

- 7.24.7 **Revision in ToD Rebate for off-peak hours:** The Commission has accepted MSEDCL's proposal for reduction in off-peak ToD rebate for night hours from 250 paise/kWh to 150 paise/kWh, however, the Commission has rejected its proposal for modifications in time-slots. The Commission has directed MSEDCL to study its proposal for revision in time-slots, in the light of various technical and commercial aspects and submit its analysis along with any future proposal for revision in time-slots.
- 7.24.8 **Power Factor Incentive/Penalty:** On the MSEDCL's proposal of reducing Power Factor Incentive, the Commission has opined that it would not be proper to change the Power Factor incentive/penalty structure at this stage. The Commission has directed MSEDCL to study select cases of PF (lead/lag) incentive/penalty along with their voltage profile, and explore the possibility of implementing kVAh metering for selected categories. MSEDCL should submit its study report along with case scenarios with its next Tariff determination Petition.
- 7.24.9 **Residential:** The tariff for domestic category is below ACoS, which needs to be increased gradually. However, the Commission has reduced Energy Charges for domestic/residential consumers particularly for consumers with consumption below 100 units per month, and only marginal increase for consumption upto 300 units per month, with marginal increase in Fixed Charges. Further, the Commission has retained the benefit of telescopic slabs, which will benefit all domestic consumers.
- 7.24.10 **Public Service: Government Educational Institutes/Hospitals:** The Commission has segregated Public Service category into two sub-categories i.e. (A) Public Services-Government Educational Institutions, Hospitals & Primary health Centers and (B) Public Services-Others.
- 7.24.11 **Powerloom:** The Commission has decided to re-create LT Industries - Powerloom [LT-V(A)] as a separate sub-category under LT Industries (LT-V), wherein the Energy Charges has been determined at different rates which are lower than the remaining sub-category LT Industries – Others [LT-V(B)].
- 7.24.12 **Stringent directions for payment discipline:** The Commission is deeply concerned about the persistent delays in payments by MSEDCL, reflected by unacceptably large and mounting DPC liabilities which MSEDCL has incurred and has projected in its Petition. Such payment delays also jeopardise the finances and working of the other Licensees including private and public Utilities. The Commission observes that the Tariff of all stakeholders is determined on Cost-plus method and therefore, it is not clear to the Commission as to why Utilities delay in making timely payment as laid down in Agreement or Order. The Commission is of the view that the stakeholders are required to devise an effective mechanism to curb this unfortunate practice and to ensure that timely payment is made to all the parties. The MSEDCL is directed to lay down a transparent system by which monthly payment to all the Suppliers are regular. This will not only negate the need for delayed payment charges but also would also enable all stakeholders to plan

their finances in reasonable and cost effective manner. The Commission has extensively dealt with the issue of delay in payment of Transmission Charges by TSUs under its Order in Case No. 57 of 2015. In the said Order, the Commission has issued necessary directions to STU to approach the Commission, with its suggestions for dealing with past payment arrears and minimising future delays, through a Petition. In case of Generating Companies, the PPAs provide for payment security mechanism. The Commission directs MSEDCL to provide status of operationalisation of such payment security mechanisms under the PPA along with the next Tariff Petition.

- 7.24.13 **Directions for Agriculture Metering Plan:** The Commission directs MSEDCL to complete the metering within a period of 3 years in such a manner that, by the end of FY 2017-18, the entire un-metered consumption should be converted to metered consumption. The Commission hereby directs MSEDCL to complete 100% metering within a period of 3 years. MSEDCL should modify its current metering plan accordingly, and submit the detailed circle-wise revised metering plan for agriculture consumers within 60 days from date of this Order. While developing such metering plan, priority should be accorded for metering of un-metered connection with Connected Load in excess of 5 HP. Further, the Commission opines that MSEDCL should encourage voluntary participation by interested un-metered agricultural consumers for conversion to metered connection and should be taken up on priority. The region-wise planned metering programme should not pose constrain for installation of meters for such voluntary conversion to metered connection.
- 7.24.14 **Directions to improve Consumer Service & Consumer Outreach:** The Commission has taken note of several difficulties and challenges expressed by consumers regarding redressal of their grievances qua metering, billing and payment issues during public process. The Commission has advised MSEDCL to improve upon their consumer outreach activities and extend use of technological solutions through mobile alerts, e-bills through emails and more payment options to facilitate online payment and using other modes of payment gateways. The Commission has also issued necessary directions as regards compliance to standard of performance and web publication key performance parameters on regular basis.
- 7.24.15 **Direction to prepare action plan for Arrear recovery and publish on website:** The Commission hereby directs MSEDCL to submit its action plan for recovery of arrears and also publish on its website quarterly report on status of arrears and recoveries made during the quarter against each consumer category and across all the circles.
- 7.24.16 **Direction for publishing meter related information on website:** The Commission recognizes that innovative measures proposed by MSEDCL for feeder Franchisee at pilot level may be explored but at the same time, MSEDCL should review its billing related process, identify current limitations/gaps and areas for improvement and take corrective steps and monitor the implementation progress of

necessary actions at highest level. Further, MSEDCL may explore third party process audit of its billing processes including IT audit of its billing software/system.

- 7.24.17 **Direction for submission of EHV consumer data:** The Commission observes that it is necessary to undertake detailed analysis of VCoS to be able to make rational judgment for creation of separate tariff category for EHV consumers. At present, the Commission has decided to continue with current practice of extending rebate at the rate of 3% on Base Energy Charge plus ToD charge for all EHV consumers availing supply at 66 kV and above, as currently under operation. However, the Commission shall scrutinize and explore the need for creation separate tariff category for EHV consumer in future. The Commission hereby directs MSEDCL to account for all relevant data for EHV consumers such as their consumption, revenue, rebate etc. and submit the same at the time of next tariff determination process.
- 7.24.18 **Direction for using load shedding protocol only as a load regulation measure:** The Commission notes the various submissions made by MSEDCL on implementation of load shedding protocol. However, the Commission opines that load shedding protocol was devised as load regulation measure to address significant power shortage situation then prevalent in the State. In case when there is sufficient availability of power, no consumer should be subjected to load shedding. The Commission strongly feels that electricity is a catalyst for growing economy therefore, it is imperative that all citizens of Maharashtra are provided with uninterrupted power supply. Reducing the technical and commercial losses and improving collection efficiency is the responsibility of the Distribution Licensee. Hence, the Commission rejects MSEDCL's stand to apply load shedding protocol when there is sufficient availability of power in the system. The Commission directs MSEDCL to ensure that load shedding protocol is used only as load regulation measure in the shortage situation and not as a matter of routine.
- 7.24.19 **Direction for not levying LBT without approval of the Commission:** The Commission directs MSEDCL to not levy LBT on the consumers. MSEDCL should legally examine and pursue the issue of levy of LBT with Appropriate Authorities. However, the Commission grants liberty to MSEDCL to separately file Petition with specific instant for recovery of the costs associated with Local Body Tax.
- 7.24.20 **Direction for developing a comprehensive Safety Plan:** The Commission directs MSEDCL to develop comprehensive plan to conduct consumer awareness programmes at circle/sub-Divisions level and also annual training/grading system for its team. A safety guidelines and manual should be published on the website.
- 7.24.21 **Direction for submitting detailed reasoning for reporting sudden increase in Agriculture Consumption:** The Commission directs MSEDCL to submit in the next tariff Petition, the reasons for such increase in agriculture consumption along with Circle-wise number of agriculture consumers (metered/un-metered),

- connected load (metered/un-metered), assessment of agriculture consumption Index, and agriculture sales (metered/un-metered) for FY 2013-14 and FY 2014-15.
- 7.24.22 **Direction for meeting RPO target:** The Commission directs MSEDCL has to ensure that the resource-specific RPO targets for Solar, Mini/Micro Hydro and Non-Solar RE are met, and that it follows the dispensations in the Commission's Order with regard to meeting the RPO shortfalls cumulatively in FY 2015-16..
- 7.24.23 **Direction for submitting GFA data for Distribution Franchisee Areas:** The Commission directs MSEDCL to submit the detailed break-up of GFA for each Franchisee separately for the purpose of truing up at the end of the Control Period.
- 7.24.24 **Direction for submitting data for loss of revenue on account of allowing unauthorised shifting from Continuous to non-Continuous:** The Commission directs MSEDCL to submit the actual loss of revenue on this account for respective years along with the next ARR Petition.
- 7.24.25 **Direction for submitting energy consumption data for separated Agriculture Feeders:** The Commission directs MSEDCL to submit energy consumption on the separated Agriculture Feeders for FY 2013-14 and FY 2014-15 within 60 days from issuance of this Order.
- 7.24.26 **Direction for 100% DTC Metering Plan:** The Commission directs MSEDCL to submit the detailed status of Circle-wise DTC metering, and its action plan for accomplishing 100% DTC metering with time-lines to the Commission within sixty (60) days of issuance of this Order. MSEDCL should also submit updated status report of DTC metering and energy accounting report of metered DTCs in its next Tariff Petition.
- 7.24.27 **Direction for submitting information on Performance Indices:** The Commission directs MSEDCL to update the performance indices on a monthly basis on its website and also submit quarterly report to the Commission in accordance with Regulation 10.3 of MERC (Standard of Performance of Distribution Licensees, period for giving supply and determination of compensation) Regulations, 2014
- 7.24.28 **Direction for recovery of arrears from DF:** The Commission directs MSEDCL to submit the steps taken by MSEDCL to recover pending arrears as per the distribution Franchisee Agreement (s), in its next Tariff Petition.
- 7.24.29 **Direction to provide Register of Assets:** The Commission directs MSEDCL to maintain in its Asset Register with the details of useful life for each asset, and consider retirement of assets once it is over.
- 7.24.30 **Direction to submit status of action plan for Distribution Loss Reduction:** The Commission directs MSEDCL to submit the status of implementation of the action plan for reducing Distribution Losses in 21 Divisions (where MSEDCL has targeted to reduce Distribution Loss to less than 20%) within 60 days.



7.24.31 **Direction to submit detailed methodology for working out Voltage-wise Cost of Supply:** The Commission directs MSEDCL to undertake a detailed study for determination of VCoS and submit its findings in its next Petition for Tariff determination.

## **7.25 Agriculture Subsidy**

7.25.1 The Commission is aware of the need of providing support to Agriculture sector. Therefore, the electricity tariff for Agriculture sector has consistently been kept very low as compared to the ACoS. Even after marginal increase for un-metered category in this Order, Agricultural tariff would be only around 50% of ACoS. The Commission is also aware of the fact that in addition to lower tariff fixed by the Commission, Government of Maharashtra is providing direct subsidy under Section 65 of the Electricity Act, 2003. However, it is noticed that despite the subsidy the residual recovery from the Agriculture sector is only around 38% of the billed amount. Agriculture consumption is approximately 24% of total electricity sales of MSEDCL. The lower recovery here severely affects the finances of the Utility. The Commission opines that it is necessary for the Government to address the issue seriously and perhaps be more focussed in its distribution of subsidy. There is a possibility that the time has come for Government to consider categorisation of Agriculture subsidy based on some transparent objective criteria.

## **7.26 Applicability of the Order**

7.26.1 This MYT Tariff for MSEDCL for the Control Period from FY 2013-14 to FY 2015-16, shall come into force with effect from 1 June, 2015.

7.26.2 For the purpose of tariff determination under this Order, the Commission has not considered the impact of the Order in Case No. 122 of 2014, towards MSPGCL's final true up for FY 2012-13. In the said Order the Commission has allowed recovery of Rs. 1,240.94 Crore amount in six equal instalments (April 2015 to September 2015) and MSEDCL was allowed to pass it on to consumers as per provisions of MYT Regulations. Methodology specified in the said Order will be continued for the recovery of balance amount.

In view of above, the Petition in the matter of Case No.121 of 2014 is disposed off.

**Sd/-**  
**Deepak Lad**  
**Member**

**Sd/-**  
**Azeez M. Khan**  
**Member**

**Sd/-**  
**Chandra Iyengar**  
**Chairperson**

**ANNEXURE I****Revenue from revised Tariffs effective from 1 June, 2015 \***

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. Crore)	Revenue from Energy Charge (Rs. Crore)	Total (Rs. Crore)	ABR (Rs. / kWh)
<b>HT Category</b>									
<b>HT I: HT – Industry</b>									
HT I (A) – Continuous Industry (on Express Feeders)	2,049	220	721	13,167	54,47,168	1,352	9,489	10,840	8.23
HT I (B) – Non-Continuous Industry (not on Express Feeders)	10,420	220	671	13,030	51,82,508	1,286	8,737	10,023	7.69
HT I (C) – Seasonal Industry	657	220	780	166	1,77,912	44	129	173	10.47
<b>ToD Consumption</b>									
2200 Hrs-0600 Hrs			(150)	8,700			(1,305)	(1,305)	
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs			-	10,018			-	-	
0900 Hrs-1200 Hrs			80	3,427			274	274	
1800 Hrs-2200 Hrs			110	4,218			464	464	
<b>Total HT I: HT – Industry</b>	<b>13,126</b>			<b>26,362</b>	<b>108,07,589</b>	<b>2,682</b>	<b>17,788</b>	<b>20,470</b>	<b>7.76</b>
<b>HT II: HT – Commercial</b>									
HT II (A): Express Feeders	443	220	1,115	811	6,91,282	146	905	1,051	12.95
HT II (B): Non-Express Feeders	2,585	220	1,062	1,395	8,72,194	184	1,481	1,666	11.94
<b>ToD Consumption</b>									
2200 Hrs-0600 Hrs			(150)	662			(99)	(99)	
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs			-	904			-	-	
0900 Hrs-1200 Hrs			80	287			23	23	

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. Crore)	Revenue from Energy Charge (Rs. Crore)	Total (Rs. Crore)	ABR (Rs. / kWh)
1800 Hrs-2200 Hrs			110	353			39	39	
<b>Total HT II: HT - Commercial</b>	3,028			2,206	15,63,476	330	2,349	2,679	12.14
<b>HT III: HT – Railways</b>	42	-	846	1,505	3,79,500		1,274	1,274	8.46
<b>HT IV: HT - Public Water Works (PWW)</b>									
HT IV (A): Express Feeders	478	220	564	1,154	2,47,370	63	650	714	6.19
HT IV (B): Non-Express Feeders	447	220	542	239	1,06,018	27	130	157	6.56
<b>ToD Consumption</b>									
2200 Hrs-0600 Hrs			(150)	460			(69)	(69)	
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs				529			-	-	
0900 Hrs-1200 Hrs			80	181			14	14	
1800 Hrs-2200 Hrs			110	223			25	25	
<b>Total HT IV: HT - Public Water Works (PWW)</b>	925			1,393	3,53,388	90	750	840	6.03
<b>HT V: HT – Agriculture</b>	1,307	30	332	871	5,77,905	21	290	310	3.56
<b>HT VI: HT - Bulk Supply (Residential)</b>	336	220	581	217	90,400	24	126	150	6.90
<b>HT VIII (B): HT - Temporary Supply Others (TSO)</b>	12	290	1,250	4	4,968	2	6	7	16.39
<b>HT IX: HT - Public Services</b>									
<b>HT IX (A): HT - Public Services - Government</b>	57			44	18,855	4	31	35	7.81
HT IX (A) (i): Express Feeders	12	220	720	23	7,712	2	17	18	7.91
HT IX (A) (ii): Non-Express Feeders	46	220	660	21	11,143	2	14	16	7.71
<b>HT IX (B): HT - Public Services - Others</b>	1,089			840	3,58,245	76	727	803	9.56
HT IX (B) (i): Express Feeders	221	220	889	437	1,46,533	31	389	420	9.60

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. Crore)	Revenue from Energy Charge (Rs. Crore)	Total (Rs. Crore)	ABR (Rs. / kWh)
HT IX (B) (ii): Non-Express Feeders	867	220	841	402	2,11,713	45	338	383	9.52
<b>ToD Consumption</b>									
2200 Hrs-0600 Hrs			(150)	265			(40)	(40)	
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs			-	362			-	-	
0900 Hrs-1200 Hrs			80	115			9	9	
1800 Hrs-2200 Hrs			110	141			16	16	
<b>Total HT IX: HT - Public Services</b>	1,146			884	3,77,100	80	743	823	9.30
<b>HT X: HT – Ports</b>	2	220	1,091	86	14,450	4	94	97	11.32
<b>HT – MSPGCL Auxiliary Supply</b>	14			56	28,580	-			
<b>Total HT Category</b>	<b>19,938</b>			<b>33,585</b>		<b>3,232</b>	<b>23,419</b>	<b>26,651</b>	<b>7.94</b>
<b>LT I: LT - Residential</b>									
<b>BPL (0-30 Units)</b>	4,91,394	10	87	113	56,531	6	10	16	1.42
<b>Consumption &gt; 30 Units per month</b>	169,75,272			18,019	162,84,482				
1-100 Units	113,58,624	50	376	11,888	108,96,397	682	4,471	5,152	4.33
101-300 Units	40,90,463	50	721	4,522	39,24,006	245	3,259	3,504	7.75
301-500 Units	6,74,274	50	995	740	6,46,835	40	737	777	10.50
<b>501-1000 Units per month</b>	4,21,773	50	1,131	452	4,04,610	25	511	537	11.87
<b>Above 1000 Units per month</b>	3,39,505	50	1,250	416	3,25,690	20	520	541	12.99
<b>Three Phase Connection</b>	90,632	150			86,944	16	-	16	
<b>Total LT I: LT - Residential</b>	174,66,666			18,132	163,41,013	1,035	9,507	10,543	5.81

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. Crore)	Revenue from Energy Charge (Rs. Crore)	Total (Rs. Crore)	ABR (Rs. / kWh)
<b>LT II: LT - Non-Residential</b>									
<b>LT II (A): 0 -20 kW</b>									
LT II (A) (i): 0-200 Units	7,58,291	220	660	1,556	13,62,044	200	1,027	1,228	7.89
LT II (A) (ii) Above 200 units	7,65,971	220	962	1,475	13,75,838	202	1,419	1,621	10.99
<b>LT II (B): &gt;20-50 KW</b>	17,557	220	1,020	620	6,56,229	139	633	771	12.43
<b>LT II (C ) &gt;50 KW</b>	3,742	220	1,301	359	3,49,949	74	467	541	15.07
<b>ToD Consumption</b>							-		
2200 Hrs-0600 Hrs			(150)	294			(44)	(44)	
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs			-	401			-	-	
0900 Hrs-1200 Hrs			80	127			10	10	
1800 Hrs-2200 Hrs			110	157			17	17	
<b>Total LT II: LT - Non-Residential</b>	15,45,560			4,011		615	3,529	4,144	10.33
<b>LT III: LT - Public Water Works (PWW)</b>									
LT III (A): 0-20 kW	45,332	60	270	542	2,50,157	18	147	165	3.04
LT III (B): > 20 kW and ≤ 40 kW	759	70	380	67	29,076	2	26	28	4.16
LT III (C ): >40 kW	208	105	500	51	15,361	2	26	28	5.37
<b>Total LT III: LT - Public Water Works (PWW)</b>	46299			661		22	198	220	3.33
<b>LT IV: LT – Agriculture</b>									
LT IV (A): LT - Agriculture Un-metered Tariff - Pumpsets	13,91,662			8,982	75,90,016	3,174	-	3,174	3.53
Zones with (Above 1318 Hrs/HP/Annum)				5,130	47,05,810				
0-5 HP		374		3,591	32,94,067	1,479	-	1,479	

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. Crore)	Revenue from Energy Charge (Rs. Crore)	Total (Rs. Crore)	ABR (Rs. / kWh)
Above 5 HP		406		1,539	14,11,743	688	-	688	
Zones with (Below 1318 Hrs/HP/Annum)				3,852	28,84,206				
0-5 HP		283		2,696	20,18,944	686	-	686	
Above 5 HP		310		1,156	8,65,262	321	-	321	
LT IV (B): LT – Agriculture Metered – Pumpsets	24,27,995	20	258	13,352	126,65,295	304	3,449	3,753	2.81
LT IV (C): LT - Agriculture Metered – Others	19,745	50	360	109	1,03,841	6	39	46	4.17
<b>Total LT IV: LT - Agriculture</b>	<b>38,39,402</b>			<b>22,444</b>		<b>3,484</b>	<b>3,488</b>	<b>6,973</b>	<b>3.11</b>
<b>LT V: LT - Industry</b>									
<b>LT V(A): LT Industry - Power Looms</b>	<b>32,113</b>			<b>1,640</b>	<b>6,33,403</b>	<b>37</b>	<b>1,008</b>	<b>1,045</b>	<b>6.37</b>
LT V (A) (i): 0-20 KW	28,393	220	543	828	3,64,679	7	450	457	5.52
LT V (A) (ii): Above 20 KW	3,720	150	688	812	2,68,724	29	559	588	7.23
<b>LT V(B): LT Industry - General</b>	<b>2,94,526</b>			<b>4,646</b>	<b>62,51,245</b>	<b>446</b>	<b>2,956</b>	<b>3,402</b>	<b>7.32</b>
LT V (B) (i): 0-20 KW	2,38,872	220	551	1,945	27,06,799	63	1,072	1,135	5.83
LT V (B) (ii): Above 20 KW	55,653	150	698	2,701	35,44,445	383	1,884	2,267	8.39
<b>ToD Consumption</b>									
2200 Hrs-0600 Hrs			(150)	632			(95)	(95)	
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs			-	1,616			-	-	
0900 Hrs-1200 Hrs			80	527			42	42	
1800 Hrs-2200 Hrs			110	738			81	81	
<b>Total LT V: LT - Industry</b>	<b>3,26,639</b>			<b>6,286</b>		<b>482</b>	<b>3,992</b>	<b>4,475</b>	<b>7.12</b>
<b>LT VI: LT - Street Lights</b>									
LT VI (A): Gram Panchayat A, B & C Class Municipal Council	64,950	50	478	1,222	2,21,412	13	584	598	4.89

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. Crore)	Revenue from Energy Charge (Rs. Crore)	Total (Rs. Crore)	ABR (Rs. / kWh)
LT VI (B): Municipal Corporation Area	17,829	50	580	411	1,26,355	8	238	246	5.98
<b>Total LT VI: LT - Street Lights</b>	82,779			1,632		21	823	843	5.17
<b>LT VII: LT - Temporary Supply</b>									
LT VII (A): Temporary Supply Religious (TSR)	476	290	371	2	2,052	0	1	1	4.51
LT VII (B): Temporary Supply Other (TSO)	2,368	360	1,500	16	13,887	1	23	24	15.66
<b>Total LT VII: LT - Temporary Supply</b>	2,844			18	15,939	1	24	25	14.36
<b>LT VIII: LT - Advertisements and Hoardings</b>	1,909	575	1,700	3	5,217	1	5	6	21.40
<b>LT IX: LT - Crematorium and Burial Grounds</b>	99	290	391	2	791	0	1	1	4.12
<b>LT X: LT - Public Services</b>									
<b>LT X(A): LT Public Services - Government</b>	4,397			18	9,646	2	10	13	7.03
LT X (A) (i) <20 kW	4,321			12	6,021	1	6	7	6.31
0-200 Units	1,822	220	454	5	2,539	0	2	3	5.59
>200 units	2,499	220	584	7	3,482	1	4	5	6.76
LT X (A) (ii) >20-50 kW	55	220	650	3	1,863	0	2	2	8.13
LT X (A) (iii) >50 kW	21	220	720	3	1,761	0	2	3	8.67
<b>LT X(B): LT - Public Services – Others</b>	39,572			161	86,813	19	109	127	7.90
LT X (B) (i) <20 kW	38,889			105	54,192	10	67	77	7.30
0-200 Units	16,400	220	492	41	22,853	4	20	25	5.97
>200 units	22,489	220	722	64	31,339	6	46	52	8.14
LT X (B) (ii) >20-50 kW	493	220	732	27	16,771	4	20	24	8.95
LT X (B) (iii) >50 kW	190	220	768	29	15,850	4	22	26	9.15
<b>ToD Consumption</b>									

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. Crore)	Revenue from Energy Charge (Rs. Crore)	Total (Rs. Crore)	ABR (Rs. / kWh)
2200 Hrs-0600 Hrs			(150)	19			(3)	(3)	
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs			-	25			-	-	
0900 Hrs-1200 Hrs			80	8			1	1	
1800 Hrs-2200 Hrs			110	10			1	1	
<b>Total LT X: LT- Public Services</b>	43,969			179		21	118	139	7.76
<b>Total LT Category</b>	<b>233,70,648</b>			<b>53,381</b>		<b>5,684</b>	<b>21,685</b>	<b>27,369</b>	<b>5.13</b>
Bhiwandi			362	3,837			1,390	1,390	3.62
Nagpur			505	1,566			791	791	5.05
Jalgaon			563	891			501	501	5.63
Stand By Charges								420	
LF/PF Incentives/EHV Rebate								(1,521)	
<b>MSedCL Total Revenue</b>	<b>233,90,586</b>			<b>93,261</b>		<b>8,916</b>	<b>47,787</b>	<b>55,602</b>	<b>5.96**</b>

\*Revenue indicative (due to the creation of new categories for which information is not available currently).

\*\*ABR, considering sales at input level for DF"s



## Annexure II: Approved Tariff Schedule

---

### **MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.**

**(WITH EFFECT FROM 1 June, 2015)**

The 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, in its Multi Year Tariff Order dated 26 June, 2015 in Case No. 121 of 2014, the Tariff for supply of electricity by Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for various classes of consumers as applicable from 1 June, 2015.

#### **GENERAL:**

1. These Tariffs supersede all Tariffs so far in force.
2. The Tariffs are subject to revision and/or surcharge that may be levied by MSEDCL from time to time as per the directives of the Commission.
3. The Tariffs are exclusive of Electricity Duty, Tax on Sale of Electricity (ToSE) and other charges as levied by Government or other competent Authorities, which will be payable by consumers in addition to the Tariffs.
4. The Tariffs are applicable for supply at one point only.
5. MSEDCL may measure the Maximum Demand for any period shorter than 30 minutes of maximum use, subject to conformity with the prevalent Supply Code, in cases where it considers that there are considerable load fluctuations in operation.
6. The Tariffs are subject to the provisions of the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005, as amended from time to time, and any directions that may be issued by the Commission.
7. Unless specifically stated to the contrary, the figures of Energy Charge relate to Rupees per unit (kWh) charge for energy consumed during the month.
8. Fuel Adjustment Costs (FAC) Charge as may be approved by the Commission from time to time shall be applicable to all categories of consumers, and will be charged over and above the Tariffs on the basis of the FAC formula specified by the Commission and computed on a monthly basis.

**LOW TENSION (LT) – TARIFF****LT I (A): LT – Residential (BPL)**Applicability:

This category shall be applicable to residential consumers who have a sanctioned load upto 0.1 kW, and who have consumed upto 360 units per annum in the previous financial year. The applicability of the Below Poverty Line (BPL) category will be assessed at the end of each financial year. If more than 360 units have been consumed in the previous financial year, the consumer will henceforth be considered under the LT-I - Residential category. Such consumer, once classified under the LT-I – Residential category, cannot revert back to the BPL category.

The categorisation of such BPL consumers will be reassessed at the end of the financial year, on a pro rata basis, if consumption is for only part of the year. Similarly, the classification 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.

All new consumers subsequently added in any month with a sanctioned load of upto 0.1 kW and consumption between 1 to 30 units (on pro rata basis of 1 unit/day) in the first billing month, will be considered in the BPL Category.

No Institutions will be covered under BPL category.

**Rate Schedule**

<b>Consumption Slab (kWh)</b>	<b>Fixed / Demand Charge (Rs./month)</b>	<b>Energy Charge (Rs/kWh)</b>
LT 1(A): LT – Residential - BPL Category (0-30 units)	10.00	0.87

**LT I (B): LT – Residential**Applicability:

This category shall be 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 places:

- a) Private residential premises, Government/semi-Government residential quarters;
- b) Premises exclusively used for worship, such as temples, gurudwaras, churches, mosques, etc., provided that halls, gardens or any other portion of the premises that may be let out for a consideration or used for commercial activities would be charged at the LT-II tariff as applicable;
- c) All Students' Hostels affiliated to Educational Institutions;
- d) All Hostels, such as Students Hostels, Working Men/Women's Hostels;
- e) Other types of Hostels, such as (i) Homes/Hostels for Destitutes, Persons with Disabilities/ Handicapped persons, or mentally ill persons (ii) Remand Homes (iii) Dharamshalas, (iv) Rescue Homes, (v) Orphanages, subject to verification and confirmation by MSEDCL's concerned Zonal Chief Engineer or equivalent;
- f) Government / Private / Co-operative Housing Colonies (where electricity is used exclusively for domestic purpose) only for common facilities, like Water Pumping / Street Lighting / Lifts /Parking Lots/ Fire Fighting Pumps / Premises (Security) Lighting, etc.;
- g) Sports Club / Health Club / Gymnasium / Swimming Pool / Community Hall of Government / Private / Co-operative Housing Colonies, provided they are situated in the same premises, and are exclusively meant for the members of such Government / Private / Co-operative Housing Colonies and no outsider is allowed therein;
- h) Telephone booths owned/operated by persons with Disabilities/Handicapped persons;
- i) Residential premises used by professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc., in furtherance of their professional activities in their residences, but shall not include Nursing Homes and any Surgical Wards or Hospitals;
- j) Single-phase household Flour Mills (Ghar-ghanti) used for captive purpose only;
- k) Any residential LT consumer with consumption upto 500 units per month (current month during which the supply is being taken), and who undertakes construction or renovation

activity in his existing premises, does not require any separate temporary connection, and would be billed at this residential Tariff rate;

- l) Consumers who have taken power supply on High Tension for any of the above purposes shall be billed as per the Tariff applicable for power supply on Low Tension.

The LT-Residential tariff shall also be applicable to consumers undertaking business or other commercial / industrial / non-residential activities from a part of their residence, subject to the condition that 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 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 henceforth not be eligible for the Tariff under this category, but be charged at the Tariff applicable for such consumption, with prior intimation to the consumer.

**Rate Schedule**

Consumption Slab (kWh)	Fixed/Demand Charge (Rs/month)	Energy Charge (Rs/kWh)
1-100 units	Single Phase: Rs. 50 Three Phase: Rs.150 \$\$	3.76
101 – 300 units		7.21
301 – 500 units		9.95
501-1000 units		11.31
Above 1000 units		12.50

**Note:**

- a) \$\$ Additional Fixed Charge of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.
- 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 as per the respective category as may be applicable.

**LT II: LT – Non-Residential**

**(A) 0-20 kW**

Applicability:

This category shall be applicable for electricity used at Low/Medium Voltage in all non-residential, non-industrial premises 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, pumping in the following places (but not limited to):

- a) Non-Residential, Commercial and Business premises, including Shopping malls/Show rooms;
- b) Combined lighting and power services for Entertainment, including film studios, cinemas and theatres, including multiplexes, Hospitality, Leisure, Meeting/Town Halls and Recreation and Public Entertainment places;
- c) Offices, including Commercial Establishments;
- d) Marriage Halls, Hotels / Restaurants, Ice-cream parlours, Coffee Shops, Guest Houses, Internet / Cyber Cafes, Telephone Booths not covered under LT I above, and Fax / Xerox Shops;
- e) Automobile and any other type of repair centres, Retail Gas Filling Stations, Petrol Pumps & Service Stations, including Garages, Tyre Retreading / Vulcanizing units;
- f) Tailoring Shops, Computer Training Institutes, Typing Institutes, Photo Laboratories, Laundries, Beauty Parlours & Saloons;
- g) Banks, Telephone Exchanges, TV Stations, Micro Wave Stations, All India Radio Stations, ATM Centres;
- h) For common facilities, like Water Pumping / Street Lighting / Lifts / Fire Fighting Pumps / Premises (Security) Lighting, etc. in Commercial Complexes;
- i) Sports Club, Health Club, Gymnasium, Swimming Pool;
- j) Electricity used for the external illumination of monumental/historical/heritage buildings approved by Maharashtra Tourism Development Corporation (MTDC);
- k) Construction of all types of structures/ infrastructure such as buildings, bridges, flyovers, dams, Power Stations, roads, Aerodromes, tunnels for laying of pipelines for all purposes; and for any construction or renovation activity in the existing premises;

- l) Any residential LT consumer, with consumption greater than 500 units per month (current month during which the supply is being taken), and who undertakes construction or renovation activity in his existing premises, does not require any separate temporary connection, shall be billed at his LT-II Commercial Tariff rate;
- m) Milk Collection Centres;
- n) Airports (only activities not related to aeronautical operations);
- o) Independent Research and Development units, not covered under any other category;
- p) Electrical Charging Centres for Hybrid Vehicles; provided that, in case the consumer uses the electricity for charging his own Vehicle at his premises, the tariff shall be as per the parent category of supply).

#### **Rate Schedule**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge (Rs./ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>(A) 0-20 kW</b>		
(i) 0 to 200 units per month	220.00	6.60
(ii) Above 200 units per month (only balance consumption)	220.00	9.62

**(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).

#### **Rate Schedule**

<b>Consumption Slab</b>	<b>Fixed/ Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>(B) &gt; 20 kW and ≤ 50 kW</b>	220.00	10.20
<b>(C) &gt; 50 kW</b>	220.00	13.01
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50

<b>Consumption Slab</b>	<b>Fixed/ Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

**Note:**

The ToD tariff is compulsorily applicable to LT-II (B) and (C) category, and optionally available to LT- II (A) having Time of Day (ToD) meter installed.

**LT III: LT- Public Water Works and Sewage Treatment Plants****Applicability:**

This category shall be applicable for use of Electricity / Power Supply at Low / Medium Voltage for pumping of water, purification of water and other allied activities related to Public Water Supply Schemes and Sewage Treatment Plants, provided they are owned, operated and managed by Local Self Government Bodies, like Gram Panchayats, Municipal Councils and Municipal Corporation, etc. or by Maharashtra Jeevan Pradhikaran, Maharashtra Industries Development Corporation (MIDC) and Cantonment Boards;.

Public Water Supply Schemes and Sewage Treatment Plants (including other allied activities) owned, operated and managed by any Agency other than Local Self Government bodies (excluding Maharashtra Jeevan Pradhikaran and MIDC) shall not be eligible for LT III Tariff, and shall be billed as per either LT II (A) or LT II (B) or LT II (C), as the case may be, except those covered in LT V.

**Rate Schedule**

<b>Consumer Category</b>	<b>Fixed/Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>(A) 0 - 20 kW</b>	60.00	2.70
<b>(B) &gt; 20 kW and ≤ 40 kW</b>	70.00	3.80
<b>(C) &gt; 40 kW</b>	105.00	5.00

Consumer Category	Fixed/Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

**LT IV: LT - Agriculture****LT IV (A): LT - Agriculture Un-metered - Pumpsets**Applicability:

This category shall be applicable to motive power services exclusively for agricultural un-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 on Low Tension supply.

**Rate Schedule**

Consumer Category	Fixed/Demand Charge (Rs./ HP/ month)	Energy Charge (Rs./kWh)
<b>LT IV (A): LT - Agriculture Un-metered Tariff - Pumpsets</b>		
Category 1 Zones*		
(a) 0-5 HP	374	NIL
(b) Above 5 HP	406	NIL
Category 2 Zones#		
(a) 0-5 HP	283	NIL
(b) Above 5 HP	310	NIL

\*Category 1 Zones (with consumption norm above 1,318 hours/HP/year)

1) Bhandup (U)

2) Pune

3) Nashik

# Category 2 Zones (with consumption norm below 1,318 hours/HP/year)

1) Amaravati

2) Aurangabad

3) Kalyan

4) Konkan

5) Kolhapur

6) Latur



7) Nagpur (U)	8) Nagpur	
---------------	-----------	--

**Note:**

- i. The Flat Rate Tariff as above will remain in force only till meters are installed; once meter is installed, the consumer will be billed as per the Tariff applicable to metered agricultural consumers.
- ii. The list of Category 1 Zones (with consumption norm above 1318 hours/ HP/year) and Category 2 Zones (with consumption norm below 1318 hours/HP/year) is given above.
- iii. Supply under this Tariff will be given for a minimum load of 2 HP. If any consumer requires any load less than 2 HP for agricultural purposes, he shall be required to pay the Fixed Charge/Energy Charge on this basis as if a load of 2 HP is connected.

**LT IV (B): LT – Agriculture Metered – Pumpsets****Applicability:**

This category shall be applicable to motive power services exclusively 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 on Low Tension Supply.

**Rate Schedule**

Consumer Category	Fixed/Demand Charge (Rs./ HP/ month)	Energy Charge (Rs./kWh)
<b>LT IV (B): LT – Agriculture Metered - Pumpsets</b>	20.00	2.58

**LT IV (C): LT - Agriculture Metered – Others****Applicability**

This category shall be applicable for use of electricity / power supply at Low / Medium Voltage for:

- i. Pre-cooling plants and cold storage units for Agriculture Products – processed or otherwise;
- ii. Poultries exclusively undertaking Layer & Broiler activities, including Hatcheries;
- iii. High-Tech Agriculture (i.e. Tissue Culture, Green House, Mushroom activities), provided the power supply is exclusively utilized by such Hi-Tech Agriculture consumers for purposes directly concerned with the crop cultivation process, and that the power is not utilized for any engineering or industrial process;
- iv. Floriculture, Horticulture, Nurseries, Plantations, stand-alone Aquaculture, Sericulture, Cattle Breeding Farms, etc.;
- v. Cane crusher and/or fodder cutter for self-use for agricultural processing purpose, but shall not be applicable for operating a flour mill, oil mill or expeller in the same premises, either operated by a separate motor or change of belt drive.

#### **Rate Schedule**

<b>Consumer Category</b>	<b>Fixed/Demand Charge (Rs./ kW / month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>LT IV (C): LT – Agriculture Metered – Others</b>	50.00	3.60

#### **LT V: LT- Industry**

##### **LT-V (A): LT – Industry - Powerlooms**

##### **Applicability:**

This category shall be applicable for power supply to Powerlooms including other allied activities like, Warping, Doubling, Twisting, etc., connected at Low/Medium Tension only.

#### **Rate Schedule**

<b>Consumer Category</b>	<b>Fixed/Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>
<b>LT-V(A): LT – Industry – Powerlooms</b>		
(i) 0-20 kW	Rs. 220.00 per connection per month	5.43
(ii) Above 20 kW	Rs. 150.00 per kVA per month	6.88

Consumer Category	Fixed/Demand Charge	Energy Charge (Rs./kWh)
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

**Note:**

The ToD Tariff is compulsorily applicable for LT V (A) (ii) (i.e., above 20 kW), and optionally available to LT- V (A) (i) (i.e., up to 20 kW) having ToD meter installed.

**LT-V (B): LT - Industry - General****Applicability:**

This category shall be applicable for industrial use other than Powerlooms, and shall be applicable for Industrial use at Low/Medium Voltage in premises for purposes of manufacturing, including that used within these premises for general lighting, heating/cooling, etc.

This Tariff shall also be applicable for use of electricity / power supply for Administrative Office / Time Office, Canteen, Recreation Hall / Sports Club / Health Club / Gymnasium / Swimming Pool exclusively meant for employees of the industry, lifts, water pumps, fire fighting pumps, premises (security) 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 shall also be applicable for use of electricity / power supply by an establishment covered under the Information Technology (IT) and IT Enabled Services (ITES) as defined in the Government of Maharashtra Policy prevailing from time to time. Where such establishment does not hold the relevant permanent registration certificate, the Tariff shall be as per LT-II Category, and the LT V category shall be applicable to it after receipt of such permanent registration certificate and till it is valid.

This Tariff shall also be applicable for use of electricity / power supply for (but not limited to) the following purposes:

- a) Flour Mill, Dal Mill, Rice Mill, Poha Mill, Masala Mills, Saw Mills;
- b) Ice Factory, Ice-cream manufacturing units, Milk Processing / Chilling Plants (Dairy);
- c) Engineering workshops, Engineering Goods Manufacturing units, Printing Press, Transformer repairing workshops;
- d) Mining, Quarrying and Stone Crushing units;
- e) Garment Manufacturing units
- f) LPG/CNG bottling plants, etc.;
- g) Sewage Water Treatment Plant/ Common Effluent Treatment Plant owned, operated and managed by Industrial Association situated within industrial area only;
- h) Start up power for Generating Stations;
- i) Brick Kiln (Bhatti);
- j) Biotech Industries, as covered under the Biotechnology Policy of Government of Maharashtra;
- k) Cold Storages not covered under LT – (IV) (C);
- l) Fisheries and integrated sea-food processing units.

#### **Rate Schedule**

<b>Consumer Category</b>	<b>Fixed/Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>
<b>LT-V (B): LT – Industry – General</b>		
(i) 0-20 kW	Rs. 220.00 per connection per month	5.51
(ii) Above 20 kW	Rs. 150.00 per kVA per month	6.98
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

**Note:**

The ToD Tariff is compulsorily applicable for LT V (B) (ii) (i.e., above 20 kW), and optionally available to LT- V (B) (i) (i.e., up to 20 kW) having ToD meter installed.

**LT VI: LT – Street Light****Applicability:**

This category shall be applicable for Street Light use, and for use of Electricity / Power Supply at Low / Medium Voltage exclusively for the purpose of Street Light Services.

It shall also be applicable for use of Electricity / Power Supply at Low / Medium Voltage for the following (but not limited to) purposes, irrespective of whether such facilities are owned, operated and maintained by a Local Self-Government body:

- a) Lighting in Public Gardens (which are open to the general public free of charge, and not including gardens in private townships or amusement parks);
- b) Traffic Signals & Traffic islands;
- c) Public Sanitary Conveniences;
- d) Public Water Fountains; and
- e) Such other Public Places open to the the general public free of charge.

This category shall be also be applicable for public lighting of streets which are open for use by the general public. Streets in residential complexes, commercial complexes, industrial premises, etc. will be billed under the Tariff of respective categories. This Tariff shall also be applicable in case power supply has been released on High Tension for providing Street Light Services.

**Rate Schedule**

<b>Consumer Category</b>	<b>Fixed/Demand Charge (Rs per kW per month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>LT VI: LT – Street Light</b>		
(A) Gram Panchayat, A, B & C Class Municipal Councils	50.00	4.78
(B) Municipal Corporation Areas	50.00	5.80

**Note:**

Street Lighting having 'Automatic Timers' for switching On/Off would be levied Demand Charges on the lower of the following–

- a) 50 percent of 'Contract Demand' or
- b) Actual 'Recorded Demand'

**LT VII: LT-Temporary Supply****Applicability****LT VII (A): LT – Temporary Supply Religious (TSR)**

This category shall be applicable for Temporary use predominantly for Religious Purposes, and shall be applicable for Electricity supplied at Low/Medium Voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Moharrum, Ram Lila, Chattrapati Shivaji Jayanti, Ambedkar Jayanti, Diwali, Christmas, Guru Nanak Jayanti, etc., or areas where community prayers are held, for a period of up to one year.

**Rate Schedule**

<b>Consumption Slab (kWh)</b>	<b>Fixed/Demand Charge (Rs. Per connection per month)</b>	<b>Energy Charge (Rs./kWh)</b>
LT VII (A): LT – Temporary Supply Religious (TSR) – All Units	290.00	3.71

**LT VII (B): LT - Temporary Supply Others (TSO)**

This category shall be applicable for Temporary use other than Religious Purposes, and shall be applicable for Electricity used at Low/Medium Voltage on a temporary basis for decorative lighting for exhibitions, circuses, film shootings, marriages, etc., and any activity not covered under the tariff category LT VII (A), for a period of upto one year.

Electricity used at low / medium voltage on an emergency basis for purpose of fire-fighting activity by the fire department in residential / other premises should be charged as per the category of such premises. No Temporary Tariff shall be applied.

**Rate Schedule**

<b>Consumption Slab (kWh)</b>	<b>Fixed/Demand Charge (Rs. Per connection per month)</b>	<b>Energy Charge (Rs./kWh)</b>
LT VII (B): LT – Temporary Supply Others (TSO) – All Units	360.00	15.00

**Note:**

In case of LT VII (B), Additional Fixed Charges of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.

**LT VIII: LT - Advertisements and Hoardings****Applicability**

This category shall be applicable for use of Electricity/ Power Supply at Low/ Medium Voltage for the purpose of advertisements, hoardings and other conspicuous consumption such as external flood-lights, displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such entertainment/leisure establishments, except those specifically covered under LT-II and electricity used for the external illumination of monuments, historical/heritage buildings approved by MTDC, which shall be covered under the LT-II category depending upon the Sanctioned Load.

This Tariff is also applicable to small hoardings fixed on lamp posts/installed along roadsides.

Consumers who have taken power supply on High Tension for any of the above purposes shall be billed as per the Tariff applicable for power supply on Low Tension.

**Rate Schedule**

<b>Consumption Slab (kWh)</b>	<b>Fixed / Demand Charge (Rs. Per connection per month)</b>	<b>Energy Charge (Rs./kWh)</b>
LT VIII: LT - Advertisements and Hoardings (All Units)	575.00	17.00

**Note:**

The electricity that is used for the purpose of indicating/displaying the name and other details of the shops or commercial premises, for which electric supply is rendered, shall not be under the LT VIII Tariff Category. Such usage of electricity shall be covered under the prevailing Tariff of such shops or commercial premises.

**LT IX: LT- Crematorium and Burial Grounds****Applicability**

Applicable for use of Electricity/ Power Supply at Low/Medium Voltage in Crematoriums and Burial Grounds for all purposes, including lighting. This category will be applicable only to the portion of the premises catering to such activities. In case part of the area is being used for other commercial purposes, a separate meter will have to be provided for the same, and the consumption on this meter will be chargeable under LT-II Commercial rates as applicable.

**Rate Schedule**

<b>Consumption Slab (kWh)</b>	<b>Fixed/Demand Charge (Rs. Per connection per month)</b>	<b>Energy Charge (Rs./kWh)</b>
LT IX: LT - Crematorium & Burial – All units	290.00	3.91

**LT X: LT - Public Services****LT X (A): LT - Public Services - Government Educational Institutes and Hospitals****Applicability**

This Tariff shall be applicable to all Educational Institutions, such as Schools and Colleges, and Hospitals, Dispensaries, Primary Health Care Centres and Pathology Laboratories and Libraries and Public reading rooms of State or Central Government, Local self Government bodies such as Municipal Bodies, Zilla Parishads, Panchayat Samities or Gram Panchayat.



Sports Club / Health Club / Gymnasium / Swimming Pool attached to the Educational Institution / Hospital provided said Sports Club / Health Club / Gymnasium / Swimming Pool is situated in the same premises and is primarily meant for the students / faculty/ employees/ patients of such Educational Institutions and Hospitals.

### **Rate Schedule**

Consumption Slab (kWh)	Fixed/ Demand Charge	Energy Charge (Rs./kWh)
<b>LT X (A): LT - Public Services – Government Educational Institutes and Hospitals</b>		
<b>(i) <math>\leq 20</math> kW</b>		
0-200 units	Rs. 220.00 per connection per month	4.54
Above 200 units	Rs. 220.00 per connection per month	5.84
<b>(ii) <math>&gt;20 - \leq 50</math> kW</b>	Rs. 220.00 per kVA per month	6.50
<b>(iii) <math>&gt; 50</math> kW</b>	Rs. 220.00 per kVA per month	7.20
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

The ToD Tariff is applicable for LT-X (A) (ii) and LT-X (A) (iii) (i.e., above 20 kW) and optionally available to LT- X (A) (i) (i.e., up to 20 kW) having ToD meter installed.

### **LT X (B): LT - Public Services - Others**

#### **Applicability**

This Tariff shall be applicable to Educational Institutions such as Schools and Colleges, and Hospitals, Dispensaries, Primary Health Care Centres and Pathology Laboratories and Libraries and Public reading rooms other than those of State or Central Government, Municipal Bodies, Zilla Parishads, Panchayat Samities or Gram Panchayat; all offices of

Government/Municipal Bodies, Local Authority, local self-Government, Zilla Parishad, and Gram Panchayat; Police Stations, Police Chowkies, Post Offices, Defence establishments (army, navy and air-force), Spiritual Organisations which are service oriented, Railway/Monorail/Metro except traction, State transport establishments,; and State Transport Workshops, Transport Workshops operated by Local Authority, Fire Service Stations, Jails, Prisons, Courts, Airports (only activity related to aeronautical operations), Ports, Sports Club / Health Club / Gymnasium / Swimming Pool attached to the Educational Institution / Hospital provided said Sports Club / Health Club / Gymnasium / Swimming Pool is situated in the same premises and is primarily meant for the students /faculty/ employees / patients of such Educational Institutions and Hospitals.

### **Rate Schedule**

<b>Consumption Slab (kWh)</b>	<b>Fixed/ Demand Charge</b>	<b>Energy Charge (Rs./kWh)</b>
<b>LT X (B): LT - Public Services – Others</b>		
<b>(i) <math>\leq 20</math> kW</b>		
0-200 units	Rs. 220.00 per connection per month	4.92
Above 200 units	Rs. 220.00 per connection per month	7.22
<b>(ii) <math>&gt;20 - \leq 50</math> kW</b>	Rs. 220.00 per kVA per month	7.32
<b>(iii) <math>&gt; 50</math> kW</b>	Rs. 220.00 per kVA per month	7.68
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

The ToD Tariff is applicable for LT-X (B) (ii) and LT-X (B) (iii) (i.e. above 20 kW), and optionally available to LT- X (A) (i) (i.e. up to 20 kW) having ToD meter installed.

## **HIGH TENSION (HT) – TARIFF**

### **HT I: HT- Industry**

#### Applicability

This category includes consumers taking 3-phase electricity supply at High Voltage for industrial purposes of manufacturing. This Tariff shall also be applicable (but not limited to) for use of electricity / power supply for Administrative Office / Time Office, Canteen, Recreation Hall /Sports Club / Health Club / Gymnasium / Swimming Pool exclusively meant for employees of the industry, lifts, water pumps, fire fighting pumps, premises (security) lighting, Research and Development units, etc., provided all such facilities are situated within the same industrial premises and supplied power from the same point of supply;

This Tariff shall also be applicable for use of electricity / power supply to IT/ITES units covered under IT Industry and IT enabled Services (as defined in the Policy of Government of Maharashtra as may be prevailing from time to time). Till the establishment doesn't receive permanent registration certificate as may be applicable; Tariff shall be as per HT-II Category and after receipt of permanent registration certificate HT I category shall be applicable till the validity of the Certificate.

This tariff shall also be applicable for use of electricity / power supply for operating:

- a) Flour Mill, Dal Mill, Rice Mill, Poha Mill, Masala Mills, Saw Mills, Powerlooms including other allied activities like, Warping, Doubling, Twisting, etc.;
- b) Ice Factory, Ice- cream manufacturing units, Milk Processing / Chilling Plants (Dairy);
- c) Engineering workshops, Engineering Goods Manufacturing units, Printing Press, Transformer repairing workshops;
- d) Mining, Quarry & Stone Crushing units;
- e) Garment Manufacturing units;
- f) Water supply scheme, Sewage Water Treatment Plant/ Common Effluent Treatment Plant owned, operated and managed by Industrial Association / Industrial unit for industrial purpose;
- g) Start up power for Generating Stations;

- h) Brick Kiln (Bhatti);
- i) Biotech Industries, as covered under Biotech Policy of Government of Maharashtra;
- j) Cold Storage not covered under HT – (V);
- k) Fisheries and integrated sea-food processing units.

### Seasonal

Applicable to Seasonal consumers, who are defined as those who normally work during a part of the year up to a maximum of 9 months, such as Cotton Ginning Factories, Cotton Seed Oil Mills, Cotton Pressing Factories, Salt Manufacturers, Khandsari/Jaggery Manufacturing Units, or such other consumers who opt for a seasonal pattern of consumption, such that the electricity requirement is seasonal in nature.

### Rate Schedule

Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>HT I: HT – Industry</b>		
(A) Continuous Industry (on Express Feeder)	220.00	7.21
(B) Non-continuous Industry (not on Express Feeder)	220.00	6.71
(C) Seasonal Industry	220.00	7.80
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

### Note:

- i. High Tension Industrial consumers having captive generation facility synchronised with the grid will pay additional Demand Charges of Rs. 20/kVA/Month only on the extent of Stand-by Contract Demand component and not on the entire Contract Demand.

- ii. Stand-by Charges will be levied on such consumers on the Stand-by component, only if the consumer's demand exceeds the Contract Demand.
- iii. This additional Demand Charge will not be applicable if there is no Stand-by demand and the Captive Unit is synchronised with the Grid only for the export of power.
- iv. Only HT industries connected on express Feeders and demanding continuous supply will be deemed as HT continuous industry and given continuous supply, while all other HT industrial consumers will be deemed as HT non-continuous industry.

## **HT II: HT- Commercial**

### Applicability:

#### HT II (A)

Applicable for use of electricity / power supply at High Tension in all non-residential, non-industrial premises 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, pumping in following (but not limited to) places:

- a) Non-Residential, Commercial and Business premises, including Shopping Malls / Show Rooms;
- b) Film Studios, Cinemas and Theatres including Multiplexes, Hospitality, Leisure, Meeting / Town Halls and Places of Recreation & Public Entertainment;
- c) Offices including Commercial Establishments;
- d) Marriage Halls, Hotels / Restaurants, Guest Houses, Internet / Cyber Cafes, Telephone Booths, Fax / Xerox Shops;
- e) Automobile, any Other Type of Workshops, Petrol Pumps & Service Stations including Garages, Tyre Retreading / Vulcanizing units;
- f) Tailoring Shops, Computer Training Institutes, Typing Institutes, Photo Laboratories, Laundries;
- g) Banks, Telephone Exchanges, TV Station, Micro Wave Stations, All India Radio Stations;

- h) For common facilities, like Water Pumping / Street Lighting / Lifts / Fire Fighting Pumps / Premises (Security) Lighting, etc. in Commercial Complexes;
- i) Sports Club, Health Club, Gymnasium, Swimming Pool;
- j) Airports (only activities not related to aeronautical operations);
- k) Gardens where entry fee is charged and Gardens having commercial activities in the premises
- l) Private Parking Space used for commercial purpose;
- m) Electrical Charging Centers of Hybrid Vehicle (However in case the consumer uses the electricity for charging own Vehicle at his premises, the tariff shall be as per parent category of supply);
- n) Warehouses/Godowns;
- o) Construction purposes not covered under HT VII category.

The Consumers in the HT II category requiring a single point supply for the purpose of downstream consumption by separately identifiable entities will have to either operate through a Franchisee route or such entities will have to take individual connections under relevant category. These downstream entities will pay appropriate tariff as applicable as per the Tariff Schedule.

#### **Rate Schedule**

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT II: HT - Commercial</b>		
(A) Express Feeders	220.00	11.15
(B) Non-Express Feeders	220.00	10.62
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

**HT III: HT - Railways**Applicability:

This category is applicable to power supply for Railway Traction only.

**Rate Schedule**

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT III: HT - Railway Traction</b>	NIL	8.46

**HT IV: HT - Public Water Works and Sewage Treatment Plants**Applicability:

The tariff will be applicable for use of Electricity / Power Supply at high voltage for pumping of water, purification of water and other allied activities related with Public Water Supply Schemes and Sewage Treatment Plants provided such Public Water Supply Schemes and Sewage Treatment Plants are owned, operated and managed by Local Self Government Bodies, like Gram Panchayat, Municipal Council, Municipal Corporation including Maharashtra Jeevan Pradhikaran, Maharashtra Industrial Development Council (MIDC) and cantonment boards;

Public Water Supply Schemes and Sewage Treatment Plants (including other allied activities) owned, operated and managed by any other Agency other than Local Self Government Body (excluding Maharashtra Jeevan Pradhikaran and MIDC) shall not be eligible for HT IV Tariff and shall be billed as per either HT II, except those covered in HT I.

**Rate Schedule**

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT IV: HT - Public Water Works (PWW)</b>		
(A) Express Feeders	220.00	5.64
(B) Non- Express Feeders	220.00	5.42

Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.10

**HT V: HT – Agricultural**Applicability:

This category shall be applicable for Electricity / Power Supply at High Tension for pumping of water exclusively for the purpose of agricultural / cultivation of crops including HT Lift Irrigation Schemes (LIS) irrespective of ownership and also for

- (i) For pre-cooling plants & cold storage units for Agriculture Produce;
- (ii) For Poultry exclusively undertaking Layer & Broiler activities, including Hatcheries;
- (iii) For High Tech Agricultural (i.e. Tissue Culture, Green House, Mushroom activities), provided the power supply is exclusively utilized by such Hi-Tech Agriculture Consumers for purpose directly concerned with crop cultivation process and further provided that the power is not utilized for any engineering or industrial process;
- (iv) For Floriculture, Horticulture, Nurseries, Plantations, Aquaculture, Sericulture and Cattle breeding farm;
- (v) For Cane crusher and/or fodder cutter for self use for agricultural processing purpose, but shall not be applicable for operating a flour mill, oil mill or expeller in the same premises, either operated by a separate motor or change of belt drive.



**Rate Schedule**

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./ kWh)</b>
<b>HT V: HT - Agriculture (All Units)</b>	30.00	3.32

**HT VI: HT - Bulk Supply (Residential)****Applicability:**

This category shall be applicable for power supply at single point in following cases:

- 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
- Person, for making electricity available to its employees residing in the same premises for residential purposes.

**Rate Schedule**

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./ kWh)</b>
<b>HT VI: HT - Bulk Supply (Residential)</b>	220.00	5.81

**HT VIII: HT - Temporary Supply****Applicability:****HT VIII (A): HT - Temporary Supply Religious (TSR)**

Electricity supplied at high Voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Moharam, Ram Lila, Chattrapati Shivaji Jayanti,

Ambedkar Jayanti, Diwali, Christmas, Guru Nanak Jayanti, etc., or areas where community prayers are held, for a period of up to one (1) year.

**Rate Schedule**

<b>Consumer Category</b>	<b>Fixed/Demand Charge (Rs. per connection per month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT VIII (A): HT - Temporary Supply Religious (TSR)</b>	290.00	3.71

**HT VIII (B): HT - Temporary Supply Others (TSO)**

Electricity used at high Voltage on a temporary basis for decorative lighting for exhibitions, circus, film shooting, marriages, etc. and any activity not covered under Tariff HT VIII (A), for a period of up to one (1) year.

Electricity used at high voltage on an emergency basis for purpose of fire fighting activity by the fire department in residential / other premises should be charged as per respective category of that premises. No Temporary Tariff shall be applied.

**Rate Schedule**

<b>Consumer Category</b>	<b>Fixed/Demand Charge (Rs. per connection per month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT VIII (B): HT - Temporary Supply Others (TSO)</b>	290.00	12.50

**Note:**

In case of HT VIII (A) and HT VIII (B), Additional Fixed Charges of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.

**HT IX: HT Public Services****HT IX (A): HT - Public Services - Government Educational Institutes and Hospitals**Applicability:

This Tariff shall be applicable to all Educational Institutions such as Schools and Colleges, and Hospitals, Dispensaries, Primary Health Care Centres and Diagnostic Centres/ Pathology Laboratories and Libraries and Public reading rooms of State or Central Government, Local self Government bodies such as Municipal Bodies, Zilla Parishads, Panchayat Samities or Gram Panchayat. Sports Club / Health Club / Gymnasium / Swimming Pool attached to the Educational Institution / Hospital provided said Sports Club / Health Club / Gymnasium / Swimming Pool is situated in the same premises and is primarily meant for the students / faculty/ employees/ patients of such Educational Institutions & Hospitals.

**Rate Schedule**

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT IX (A): HT - Public Services – Government Educational Institutes and Hospitals</b>		
(i) Express Feeders	220.00	7.20
(ii) Non-Express Feeders	220.00	6.60
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.00

**HT IX (B): Public Services – Others**Applicability

This Tariff shall be applicable to education institutions, hospitals, dispensaries, primary health care centres, pathology laboratories etc which are not covered in HT IX (A), Spiritual Organizations Police Stations, Post Offices, Defence establishments (army, navy and air

force), Public libraries and Reading rooms, Railway / Metro / Monorail except traction, State transport establishments; Railway and State Transport Workshops, Fire Service Stations, Jails, Prisons, Courts, Airports (only activities related to aeronautical operations), Pumping of Water for Tankers, Public Gardens owned by Local Self Government Bodies such as Gram Panchayat, Municipal Council/Corporation.

Sports Club / Health Club / Gymnasium / Swimming Pool attached to the Educational Institution / Hospital provided said Sports Club / Health Club / Gymnasium / Swimming Pool is situated in the same premises and is primarily meant for the students / faculty/ employees/ patients of such Educational Institutions & Hospitals.

### **Rate Schedule**

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT IX (B):HT - Public Services – Others</b>		
(i) Express Feeders	220.00	8.89
(ii) Non-Express Feeders	220.00	8.41
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.00

### **HT X: HT- Ports**

#### **Applicability:**

This Tariff is applicable for power supply to Ports connected on high tension only.

### **Rate Schedule**

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT X: HT - Ports (All units)</b>	220.00	10.91

Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>ToD Tariffs (in addition to above base Tariffs)</b>		
2200 Hrs-0600 Hrs		-1.50
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0.00
0900 Hrs-1200 Hrs		0.80
1800 Hrs-2200 Hrs		1.00

**HT XI: Metro / Monorail**Applicability:

This tariff is applicable for power supply to Metro / Monorail for Traction purpose.

**Rate Schedule**

Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>HT XI: HT - Metro/Monorail (All units)</b>	220.00	8.46

## **MISCELLANEOUS AND GENERAL CHARGES**

### Fuel Adjustment Cost (FAC) Charges

The FAC Component of Z factor charge will be determined on the basis of the Formula approved and directions 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 with respect to these levels, MSEDCL shall pass on the adjustments, due to changes in the cost of power procured due to change in fuel cost, through the FAC component of Z-factor Charge, as specified in Regulations 13.4 to 13.9 of the MERC (Multi Year Tariff Regulations), 2011 ('MYT Regulations').

The details of applicable  $Z_{FAC}$  for each month shall be available on MSEDCL website [www.mahadiscom.in](http://www.mahadiscom.in).

### Electricity Duty and Tax on Sale of Electricity

The Electricity Duty and Tax on Sale of Electricity will be levied in addition to the Tariffs approved by the Commission, and as per the Government of Maharashtra guidelines. However, the rate and the reference number of the Government Resolution/ Order by which the Electricity Duty and Tax on Sale of Electricity has been made effective shall be stated in the bill. A copy of such Resolution/Order shall be made available on the MSEDCL website [www.mahadiscom.in](http://www.mahadiscom.in).

### Power Factor Calculation

Where the average Power Factor measurement is not possible through the installed meter, the following method for calculating it during the billing period shall be adopted-

$$\text{Average Power Factor} = \frac{\text{Total}(kWH)}{\text{Total}(kVAh)}$$

$$\text{Wherein the } kVAh \text{ is} = \sqrt{\sum (kWh)^2 + \sum (RkVAh)^2}$$

(i.e., Square Root of the summation of the squares of kWh and RkVAh )

### Power Factor Incentive:

Applicable for HT I: Industry , HT II: Commercial , HT IV: Public Water Works , HT V: Agriculture , HT VI: Bulk Supply (Residential) and HT IX: Public Service [HT IX: (A) , HT IX (B)] , HT X: Ports categories, as well as LT II: Non –Residential / Commercial [LT II (B) , LT II (C)] , LT III: Public Water Works , LT V (A) (ii): Industry – Powerlooms (above 20 kW) , LT V (B) (ii): Industry – General (above 20 kW), LT X : Public Services [LT X (A) (ii) , LT X (A) (iii) , LT X (B) (ii) and LT X (B) (iii) categories].

Whenever the average Power Factor is more than 0.95, an incentive shall be given at the rate of the following percentages of the amount of the monthly bill including Energy Charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sr. No.	Range of Power Factor	Power Factor Level	Incentive
1	0.951 to 0.954	0.95	0%
2	0.955 to 0.964	0.96	1%
3	0.965 to 0.974	0.97	2%
4	0.975 to 0.984	0.98	3%
5	0.985 to 0.994	0.99	5%
6	0.995 to 1.000	1.00	7%

#### Power Factor Penalty:

Applicable for HT I: Industry , HT II: Commercial , HT IV: Public Water Works , HT V: Agriculture , HT VI: Bulk Supply (Residential) and HT IX: Public Service [HT IX: (A) , HT IX (B)] , HT X: Ports categories, as well as LT II: Non –Residential / Commercial [LT II (B) , LT II (C)] , LT III: Public Water Works , LT V (A) (ii): Industry – Powerlooms (above 20 kW) , LT V (B) (ii): Industry – General (above 20 kW), LT X : Public Services [LT X (A) (ii) , LT X (A) (iii) , LT X (B) (ii) and LT X (B) (iii) categories].

Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of the following percentages of the amount of the monthly bill including Energy Charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Penalty
1	0.895 to 0.900	0.90	0%
2	0.885 to 0.894	0.89	2%
3	0.875 to 0.884	0.88	3%
4	0.865 to 0.874	0.87	4%
5	0.855 to 0.864	0.86	5%
6	0.845 to 0.854	0.85	6%
7	0.835 to 0.844	0.84	7%
8	0.825 to 0.834	0.83	8%
9	0.815 to 0.824	0.82	9%
10	0.805 to 0.814	0.81	10%
...	...	...	...

**Note:**

PF to be measured/computed upto 3 decimals, after universal rounding off

**Prompt Payment Discount**

A prompt payment discount of one percent on the monthly bill (excluding Taxes and Duties) shall be available to the consumers if the bills are paid within a period of 7 days from the date of issue of the bill, or within 5 days of the receipt of the bill, whichever is later.

**Delayed Payment Charges (DPC)**

In case the electricity bills are not paid within the due date mentioned on the bill, DPC of 2 percent on the total electricity bill (including Taxes and Duties) shall be levied on the bill amount. For computing the time limit from the date of bill for payment of bills, “the day of presentation of bill” or “the date of the bill” or “the date of issue of the bill”, etc. as the case may be, will not be excluded.

**Rate of Interest on Arrears**



The rate of interest chargeable on arrears will be as given below-

Sl.	Delay in Payment ( months)	Interest Rate per annum (%)
1	Payment after due date up to 3 months ( 0-3)	12
2	Payment made after 3 months and before 6 months (3-6)	15
3	Payment made after 6 months (>6)	18

#### Load Factor Incentive

Consumers having load factor over 75% up to 85% will be entitled to 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 over 85 % will be entitled to incentive of 1% on the Energy Charges for every percentage point increase in load factor from 85%. The total incentive under this head will be subject to a ceiling of 15% of the Energy Charges for that consumer.

This incentive is limited to HT I: Industry, HT II: Commercial categories only. Further, the load factor rebate will be available only if the consumer has no arrears with MSEDCL, and payment is made within seven days from the date of the bill. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by MSEDCL, and the same is being made as scheduled. MSEDCL has to take a commercial decision on how to determine the time frame for which the payments should have been made as scheduled, in order to be eligible for the Load Factor incentive.

The Load Factor has been defined as:

$$\text{Load Factor} = \frac{\text{Consumption during the month in MU}}{\text{Maximum Consumption Possible during the month in MU}}$$

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor x (Total no. of hrs during the month less planned load shedding hours\*)

\* - Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme.

In case the Billing Demand exceeds the Contract Demand in any particular month, then the load factor incentive will not be payable in that month. (The Billing Demand definition excludes the demand recorded during the non-peak hours i.e. 22:00 hrs to 06:00 hrs; therefore, even if the maximum demand exceeds the Contract Demand in that duration, load factor incentive would be applicable. However, the consumer would have to pay the penal charges applicable for exceeding the Contract Demand).

#### Penalty for exceeding Contract Demand

In case a consumer (availing Demand based Tariff) exceeds his Contract Demand, he will be billed at the appropriate Demand Charge rate or the Demand actually recorded, and will be additionally charged at the rate of 150% of the prevailing Demand Charges (only for the excess Demand over the Contract Demand).

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 (CPP)

For customers having CPP, the additional Demand Charges would be Rs. 20/ kVA/month only on the extent of the Stand-by demand component, and not on the entire Contract Demand. Additional Demand Charges will be levied on such consumers on the Stand-by component, only if the consumer's demand exceeds the Contract Demand.

#### EHV supply rebate

Consumers availing supply at Extra High Voltage (66 kV and above) will be given a rebate of 3% on Base Energy Charge plus ToD charge. The EHV supply rebate will be available only if the consumer has no arrears with MSEDCL. However, it will be applicable to consumers where payment of arrears in instalments has been granted by MSEDCL, and the same is being made as scheduled. MSEDCL has to take a commercial decision on how to determine

the time frame for which the payments should have been made as scheduled, in order for the consumer to be eligible for the EHV supply rebate.

### Security Deposit

- 1) Subject to the provisions of Section 47(5) of the Electricity Act, 2003, MSEDCL may require any person to whom supply of electricity has been sanctioned to deposit a security in accordance with the provisions of Section 47(1)(a).
- 2) The amount of the Security Deposit shall be equivalent to the average of three months of billing or the billing cycle period, whichever is less. For the purpose of determining the average billing, the average of the billing to the consumer for the last twelve months or, in cases where supply has been provided for a shorter period, the average of the billing of such shorter period, shall be considered:

Provided that, in the case of seasonal consumers, the billing for the season for which supply is provided shall be used to calculate the average billing.

- 3) Where MSEDCL requires security from a consumer at the time of commencement of service, the amount of such security shall be estimated by it based on the Tariff category and Contract Demand / sanctioned load, load factor, diversity factor and number of working shifts of the consumer.
- 4) MSEDCL shall re-calculate the amount of security based on the actual billing of the consumer once in each financial year.
- 5) Where the amount of Security Deposit maintained by the consumer is higher than the security required to be maintained under the Supply Code, the Distribution Licensee shall refund the excess amount of such Security Deposit in a single instalment:

Provided that such refund shall be made upon the request of the person who gave the security and with an intimation to the consumer, if different from such person, and shall be, at the option of such person, either by way of adjustment in the next bill or by way of a separate cheque payment within a period of thirty days from the receipt of such request:

Provided further that such refund shall not be required where the amount of refund does not exceed the higher of ten per cent of the amount of Security Deposit required to be maintained by the consumer or Rupees Three Hundred.

- 6) Where the amount of security re-calculated as above is higher than the Security Deposit of the consumer, MSEDCL shall be entitled to raise a demand for additional security on the consumer.

Provided that the consumer shall be given not less than thirty days to deposit the additional security pursuant to such demand.

- 7) Upon termination of supply, MSEDCL shall, after recovery of all amounts due, refund the remaining amount held by it to the person who deposited the security, with intimation to the consumer, if different from such person.

- 8) A consumer - (i) with a consumption of electricity of not less than one lakh (1,00,000) kilo-watt hours per month; and (ii) with no undisputed sums payable to MSEDCL under Section 56 of the Act may, at the option of such consumer, deposit security, by way of cash, irrevocable letter of credit or unconditional bank guarantee issued by a scheduled commercial bank.

- 9) MSEDCL shall pay interest on the amount of Security Deposit in cash (including cheque and demand draft) to the consumer at a rate equivalent to the Bank Rate of the Reserve Bank of India:

Provided that such interest shall be paid where the amount of Security Deposit in cash is equal to or more than Rupees Fifty.

- 10) Interest on cash Security Deposit shall be payable from the date of deposit by the consumer till the date of dispatch of the refund by MSEDCL.

### **Definitions:**

#### **Billing Demand for LT Consumer Categories**

Billing Demand for LT Non-Residential / Commercial [LT: II (B) , LT II (C)] , LT III: Public Water Works , LT V (A) (ii): Industry - Power Looms (above 20 kW) , LT V (B) (ii):

Industry - General (above 20 kW) , LT X (A) Public Services - Government Owned Educational Institutes and Hospitals [LT X (A) (ii) and LT X (A) (iii)] , LT X (B) Public Services - Others [LT X (B) (ii) and LT X (B) (iii)] category having MD based Tariff:-

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:**

- Demand registered during the period 0600 to 2200 hrs. will only be considered for determination of the Billing demand.
- In case of change in Contract Demand, the period specified in Clause (a) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

**Billing Demand for HT Consumer Categories**

Billing Demand for HT I: Industry , HT II: Commercial , HT III Railway Traction , HT IV: Public Water Works , HT V: Agriculture , HT VI: Bulk Supply (Residential) , HT VIII: Temporary Supply, HT IX: Public Supply HT X : Ports and HT XI : Metro/Monorail.

Monthly Billing Demand will be the higher of the following:

- i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
- ii. 75% of the highest billing demand recorded during the preceding eleven months, subject to the limit of Contract Demand
- iii. 50% of the Contract Demand.

**Note:**

- Demand registered during the period 0600 to 2200 hrs will only be considered for determination of the Billing demand.

- In case of change in Contract Demand, the period specified in Clause (i) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

#### HT Seasonal Category (HT I)

During Declared Season, Monthly Billing Demand will be the higher of the following:

- i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
- ii. 75% of the Contract Demand
- iii. 50 kVA.

During Declared Off-season, Monthly Billing Demand will be the following:

- i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours

The Billing Demand for the consumers with CPP will be governed as per the CPP Order in Case No. 55 and 56 of 2003.

#### Contract Demand

Contract Demand means demand in Kilowatt (kW) / Kilo –Volt Ampere (kVA), mutually agreed between MSEDCL and the consumer as entered into in the agreement or agreed through other written communication (For conversion of kW into kVA, Power Factor of 0.80 shall be considered).

#### Sanctioned Load

Sanctioned Load means load in Kilowatt (kW) mutually agreed between MSEDCL and the consumer.

In case the meter is installed on the LV/MV side, the methodology to be followed for billing purpose is as follows

- 2% to be added to MV demand reading, to determine the kW or kVA billing demand, and
- ‘X’ units to the MVA reading to determine the total energy compensation to compensate the transformation losses, where is calculated as follows

‘X’ =  $(730 * \text{kVA rating of transformer}) / 500$  Units/month, to compensate for the iron losses, plus one percent of units registered on the LT side for copper losses.

## **Appendix I: List of Persons who attended the Technical Validation Session**

<b>Sr. No.</b>	<b>Name</b>	<b>Company / Institution</b>
1	Shri Ajoy Mehta	MD, MSEDCL
2	Shri Bipin Shrimali	MD, MSETCL
3	Shri Asheesh Sharma	MD, MSPGCL
4	Smt Swati Vyavahare	MSEDCL
5	Shri R.B.Goenka	VIA
6	Smt S.P. Kumbhare	MSEDCL
7	Shri S.A.Nokalje	MSPGCL
8	Shri Abhijit Deshpande	MSEDCL
9	Shri A.S. Chavan	MSEDCL
10	Shri J.M.Pardhi	MSEDCL
11	Shri S.H.Dhantole	MSEDCL
12	Shri. V.R.Shiroorkar	MSEDCL
13	Shri Rajesh Kurai	MSEDCL
14	Shri Shantanu Dixit	Prayas
15	Shri Ashok Pendse	TBIA
16	Shri Abhishek Amarnani	MSEDCL
17	Shri Ajit H. Pandit	Idam Infra
18	Shri Balwant Joshi	Idam Infra
19	Shri Pratap Hogade	MVGS
20	Shri H.A.Kapadia	Akola



## **Appendix II: List of Objectors at Public Hearings**

### **Amravati Division**

<b>Sr. No.</b>	<b>Name of the Objector</b>
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Shri Kiran Paturkar, Federation of Industries Association Vidarbha
2	Shri Ashish Subhash Chandarana, Akot
[B]	Objections / Suggestions by Consumers
3	M/s. Jaishree Balaji Spining Mill Pvt. Ltd, Khamgaon, Buldhana
4	Shri. R. B. Agarwal, Khamgaon Dist. Buldana – 444 303
5	Shri. Pramod Narayan Khandagale, Nimgaon Tal. Nandura
6	Shri Datta Daulatrao Shindhode, Yavatmal
7	Shri Baban Sonasa Khandare, Amravati.
8	Shri Rahul Dinkar Kadu, At Javalapur, Tal. Achalpur,
9	Vidarbha Chamber of Commerce & Industry, Akola - 444 001
10	Shri Nilesh Prabhakar Ghope, Achalpur, Amravati
11	M.I.D.C. Industrial Association, Amravati.
12	Akhil Bhartiya Gram Panchayat, Dist Akola
13	Shri Shakeel Ahamad
14	Dr.A.S.Gade
15	Shri Munna Rathod
16	Shri Baban Radke
17	Shri Anand C Sagar
18	Adv Rajendraji B.Bhandari
19	Shri.Omprakash B.Bhandari
20	Shri Salim Baig
21	Shri Gopal Harne
22	Shri Prafulla Kalpande
23	Shri Prajakta Chalbhati
24	Shri Satish R. Mohonkar
25	Shri Rajesh Fiske
26	Shri Vijai Jadhav
27	Shri N.T.Pethe

Sr. No.	Name of the Objector
28	Shri M.A.Kudu
29	Shri Nikhil Thakare
30	Shri Prashant Gole
31	Shri Shashank Nagare, Sakal
32	Shri Khuzami Khuram
33	Shri P.N.Khandagale
34	Shri S.S.Patic
35	Shri Gopal Shankar Dhote
36	Adv Vishal Ganoskar
37	Shri Ravindra Lakhode, Divya Marathi
38	Smt Yogiti Arkad, Navbharat
39	Shri Balasaheb Lorate
40	Shri Arun Tiwari

**Nagpur Division**

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Vidarbha Industries Association, Nagpur
[B]	Objections / Suggestions by Consumers
2	Dr. M. V. Goyanka, Wardha
3	Shri Ashok Haribhau Vairagade, Wardha.
4	Tensile Wires (India) Pvt. Ltd, Hingna Road, Nagpur
5	The Nagpur Ashok Hotel & Restaurants, Laxmi Nagar, Nagpur
6	Shri Ravindra Kaskhedikar, Janakrosh, Ramdaspath, Nagpur
7	Steel Authority Of India Ltd. Chadrapur Ferro Alloy Plant, Chadrapur
8	Shri Dilip B. Bhattalwar, Tukum, Chandrapur.
9	Vidarbha Cold Storage Association, Maskasat Itwari, Nagpur
10	Maharashtra Airport Development Company, Mumbai
11	CREDAI-NAGPUR Metro, Nagpur
12	Nag-Vidarbha Chamber of commerce, Civil Lines, Nagpur
13	Haldiram Foods International Pvt. Ltd. Bhandara Road, Nagpur
14	Shri Sanjay Dharmadhikari, Akhil Bhartiya Grahak Panchayat
15	Shri Madhavrao Nakhate, Akhil Bhartiya Kisan Union

Sr. No.	Name of the Objector
16	Shri Chandrashekhat Titarmare, BJP Kisan Morcha
17	Shri Mahendra Jichka
18	Shri Mahesh Bokde
19	Shri Kishor Wamanrao Mute
20	Shri Baban m.Kothe
21	Shri Nana Narayanrao Akhare, Bhartiya Kisan Sangh
22	Shri John Thomas
23	Shri Ramesh Shahane, Janakrosh
24	Shri Rohit Goyal
25	Shri A Chandak
26	Shri Kiran Kolpdkwar
27	Shri Ankush V Jundawar, Sakal
28	Shri A.M.Makhate, Janakrosh
29	Shri Vinod Bhisey, Janakrosh
30	Shri D.S.Dhwe, Janakrosh
31	Kamal Sharma
32	Shri Mukul Mundra

**Aurangabad Division**

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Shri Hemant Kapadia, Aurangabad
[B]	Representative of Public
2	Shri Rajesh Tope, Member of Legislative Assembly
[B]	Objections / Suggestions by Consumers
3	Parbhani District Jining Pressing Association, Parbhani.
4	Urja Sahayog, Aurangabad
5	Can-Pack India Pvt. Ltd., Waluj, Aurangabad
6	Chamber of Marathwada Industries & Agriculture, Aurangabad
7	R.L.Steels & Energy Ltd., Chitegaon, Aurangabad
8	The Meadows Holidays and Resorts Pvt.Ltd, Aurangabad
9	Bright Steel Corporation, Mumbai
10	Sanjay Techno Products Pvt.Ltd., MIDC Waluj, Aurangabad

Sr. No.	Name of the Objector
11	Trimurti Foods, Aurangabad
12	Marathwada Association of Small Scale Industries & Agriculture (MASSIA), Chikalthana Aurangabad.
13	Ahmednagar Cold-Storage Association, Ahmednagar
14	Mauli Cold Storage, Ahmadnagar
15	Kaygaon Paper Mills Ltd, Aurangabad
16	Garware Polyester Ltd. P.O.Walunj,
17	Frigorifico Allana Private Ltd, Gevrai Village, Aurangabad
18	All India Meat & Livestock Exporters Association, Mumbai
19	Sterlite Technology Ltd, Waluj, Aurangabad
20	Anand Cold Storage & Agro Products, Ahmednagar
21	Cosmo Films Ltd, Aurangabad-431136 India.
22	Cosmo Films Ltd (Sez Unit), Aurangabad -431 201
23	Videocon Industries, Aurangabad
24	Maharashtra Rajya Veej Tantrik Kamgar Sagathana, Aurangabad
25	Vidarbha Industries Association
26	Shri Bharat Motinge, MASSIA
27	Shri Ashok Bedse Patil, MASSIA
28	Shri Kishor Rathi, MASSIA
29	Shri Suresh Todkar, MASSIA
30	Shri Bhimrao Choudhari, MASSIA
31	Shri Narayan Pawar, MASSIA
32	Shri Kiran Jagtap, MASSIA
33	Shri N.A.Joshi, MASSIA
34	Shri D.B.Soni
35	Shri V.G.Deshpande
36	Nitin Kabra
37	Shri Arun Agrawal, Kalika Steels
38	Shri Sunil Agrawal, Jalna Siddhivinayak Alloys Ltd
39	Smt Manjushatai Gund Patil, Z.P,A'nagar
40	Shri S.S.Kadam, Z.P,A'nagar
41	Shri Suresh Devchand Shrisagar, Verock Engineering
42	Shri Sharad Choube
43	Shri Kamlesh Gugale

Sr. No.	Name of the Objector
44	Shri Sushil Bajaj
45	Shri Rameshwar Rathi, Samartha Agro
46	Shri Danpurkar L.B
47	Shri Girish Deveshwar
48	Shri S.P.Jawalkar, Maharashtra Rajaya Shikshan Sanstha Mandal
49	Shri Dinesh Dhawale
50	Shri Bhagwat Tompe
51	Shri S.V.Shanbhag
52	Shri Ashish Chandarana
53	Shri Sayed Layek
54	Shri Pawan Uttarwar
55	Shri Anol A.Bugdani
56	Mohsin Ahemad
57	Shri Pramod Mane
58	Shri Chandrakant Thote
59	Shri J Gupta
60	Shri Ritesh Mishra
61	Shri N.S.Inamdar
62	Shri Agrawal M.O
63	Smt Kakade Harshada Vidyadhar, Z.P,A'nagar
64	Smt Yogita Shivshakar Rajale, Z.P,A'nagar
65	Smt Minakshi Suresh Thorat, Z.P,A'nagar
66	Smt Nanda Dattatreya Ware, Panchayat Samiti,A'nagar
67	Smt Mira Bhimashankar Chakor, Panchayat Samiti,A'nagar
68	Shri Sandesh Tukaram Karle, Panchayat Samiti,A'nagar
69	Shri Shivaji Laxman Shind, Z.P,A'nagar
70	Shri Amol Sahebrao Bhangade
71	Shri Nil Vijay
72	Shri Harshad Markad
73	Shri K.D.Bhadke, Z.P,A'nagar
74	Yashwant Sahakari SutGirni,Ambad
75	Shri Pawar N.A
76	Shri Ramchandra Sharma
77	Shri Anirudhha Baddar

Sr. No.	Name of the Objector
78	Shri Prasad Kalekar
79	Shri Nitin Saraf, Greaves Cotton Ltd
80	Shri B.K.Shamved
81	Shri M.B.Patil
82	Shri R.G.Karande
83	Shri Prashat Bonge
84	Shri Suyog Nalkar
85	Shri Ashok Larke
86	Dr.Vinay T Karnavat
87	Shri M.Q.Bawla
88	Shri Yojesh Mandhani
89	Shri Sachin S.Jain
90	Shri santosh S.Deshmukh
91	Shri Manoj Parati
92	Shri Data Bare
93	Shri Balasaheb Hajare

**Nashik Division**

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Shri Siddharth Varma (Soni), Nasik
2	Shri Sham Dashrath Patil,Dhule
[B]	Representative of Public
3	Shri Vijay N.Patil, Ex Member of Parliament
[C]	Objections / Suggestions by Consumers
4	Shri.Satish Shah, Nashik
5	Loknayak Jaiprakash Narayan Shetkari Soot Girni Ltd, Untawad- Hol Tal. Shahada Dist.Nandurbar
6	Shri.Ansari Abdul Malik Mohamad Yasin, Ansari, Momin, Julaha Powerloom Confernce, Malegaon

Sr. No.	Name of the Objector
7	Shri.Mohamad Faruk Mohamad Suleman, The Malegaon Co-Operative Spinning Mills Ltd.
8	Shri.Vijay Sadashiv Moharir, Grahak Panchayat, Jalgaon
9	Shri.Nilesh B. Rohankar, Subordinate Engineer's Association, MSEB, Nashik
10	Jindal Poly Films Ltd,Nashik-Igatpuri Road, Nashik
11	Shri.Sanjay Jain, Amalner,Jalgaon
12	Shri.Chetan Jain, Shahada
13	Shri.Ashok Jain,Nandurbar
14	Malegaon Powerloom Action Committee, Malegaon
15	Ambad Industries & Manufactures Association,Nashik
16	Shri Uttam Shankar Soundane,At Post-Porwari,Nandgaon
17	Shri. Yusuf Mohamad Shaikh,Nashik Road
18	Shri. Sanjay Agrawal, Nandurbar
19	Shri. Paras Kumar Jain, Shahada
20	Shri Krushna D. Bhoyar,New Panvel
21	Adv.Rajan S.Kulkarni
22	Shri Ramesh Pawar
23	Shri Ajay Baheti
24	Shri Vinayak Salunkhe, Thyssen Krupp
25	Shri S.J.Deshmukh, NIMA
26	Shri Madhukar Brahmanekar, NIMA
27	Shri Raja
28	Shri Ritesh, Nature Fresh Cold Storage
29	Priyadarshini Cold Storage
30	Dr.Baskar Palwe
31	Shri Yogesh Dhanraj Tile
32	Shri Dandeep Agrawal
33	Shri Ashok Nagesh Patil
34	Shri Charudatta B.Shed
35	Shri Arvind N.Dixit
36	Shri T.N.Agrawal
37	Shri A.S.Dahat
38	Shri Dipak Vanmali, NMC,Nashik
39	Shri Fahim Mobin Shaikh

Sr. No.	Name of the Objector
40	Shri Ajay S.Gupta
41	Shri Nihil Shah
42	Shri Mahadar Y
43	Shri Ramesh D. Crosto
44	Shri Sonawane N.M
45	Shri Patil Y.R
46	Shri Abhilash Botekar, Times of India
47	Shri Vijay B.Joshi, NIMA
48	Shri Bhosale Vijay, Gavkari
49	Shri Famindra Mandalik, Maharashtra Times
50	Shri Mehul P.Jain, MSJ Cold Storage
51	Shri Vinod Bedarkar, Sakal
52	Shri Sanjay M.Hire, Mi Marathi -News

**Pune Division**

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Ms Ashwini Chitnis, Prayas Energy Group
[B]	Objections / Suggestions by Consumers
2	Shri.Vivek Velankar, Sajag Nagarik Manch, Pune
3	The Lagoon Resorts, Lonavala
4	Shri.Jayant Halbe, Pune
5	Shri.Pratap Hogade, Janata Dal Secular, Ichalkaraji
6	Bharat Forge Ltd, Mundawa,Pune
7	Bajaj Auto, Akurdi,Pune
8	Ichalkaranji Power loom Weavers Co-op Association Ltd, Ichalkaranji
9	Tata Construction, Mumbai
10	Shakuntala Steels, Gokul Shrigaon
11	Shri. S.K.Banerajee, Baner, Pune
12	Shri Anoop Awasthi, Legal Rights Society,Pune
13	Shri.Chandrakant Jadhav, Jadhav Industries,Kolhapur
14	Shri Ankush Pawar, Satara
15	A.B. Engineering, Add MIDC Satara



16	Bartakke Electrofab Pvt. Ltd., Satara
17	D.S. Enterprises, Addl. MIDC, Satara
18	Radhika Enterprises, Addl. MIDC, Satara.
19	Kumbheswar Enterprises, Addl. MIDC, Satara
20	Sound Casting Pvt. Ltd., MIDC, Shirol, Kolhapur
21	Manoj Industries, Shirol, Kolhapur
22	Mutha Spherocast (India) Pvt. Ltd., Kodoli, Satara
23	Century Enka Limited, Pune
24	Poly Pet, E-3/5, Old MIDC, Satara
25	Shree Ganesh Enterprises, Addl. MIDC, Satara.
26	Vardhman Industries, Addl. MIDC, Satara
27	Tork Engineering Pvt. Ltd Old MIDC, Satara
28	Utkarsh Transmissions Pvt. Ltd., Sadar Bazar, Satara
29	Utkur I & S Industries, Addl MIDC, Satara
30	Aayush Enterprises, Addl. MIDC, Satara.
31	Pratiksha Enterprises, Old MIDC, Satara
32	Bharat Enterprises, Old MIDC, Satara
33	Asha Industries, Addl MIDC Satara
34	Gajanan Packwell Pvt. Ltd. Addl. MIDC, Satara
35	Mutha Engineering (P) Ltd., MIDC, Satara
36	Omkar Plastics (P) Ltd., Addl. MIDC, Satara.
37	Shree Bhimeshwari Ispat Pvt. Ltd, Pune
38	R. R. Insulators, Addl. MIDC, Satara
39	Shree Siddhivinayak Ispat Ltd, Pune
40	Vedant Enterprises, Addl. MIDC, Satara
41	Pharande Industries, Old MIDC, Satara
42	Soham Industries, G-26, Old MIDC, Satara
43	Ideal Gas Springs Pvt. Ltd. E-3/3, Old MIDC, Satara
44	Katdare Food Products Pvt. Ltd. Addl. MIDC, Satara
45	Hirai Engineering, Plot No. N-24, Addl. MIDC, Satara.
46	Samruddhi Enterprises, Old MIDC, Satara.
47	Ashwini Industries, Addl. MIDC, Satara
48	Shree Ganesh Foundry Pvt. Ltd. Ichalkaranji
49	S.P. Packaging, Old MIDC, Satara
50	Hindustan Polyamides & Fibres Ltd. MIDC, Kurkumbh

51	Status Medical Equipments, Addl. MIDC, Satara
52	Dhanshree Industries, Old MIDC, Satara
53	Cooper Corporaton Pvt. Ltd. Addl. MIDC, Satara
54	Paranjape Autocast Pvt. Ltd. Kothrud,Pune
55	Ganesh Industries, , Addl, MIDC, Satara
56	Mutha Founders Pvt. Ltd. , Addl. MIDC Satara
57	Spark Engineers, Addl. MIDC, Satara
58	Gohel Engineering Company, Addl. MIDC, Satara
59	Wel-Flow Engineering Company, Addl. MIDC, Satara
60	Manufacturers Association of Satara, Addl. MIDC, Satara
61	Perfect Plastics, Old MIDC, Satara
62	Cyclo Instruments Pvt. Ltd. Addl.MIDC, Satara
63	Siddharth Industries, Addl. MIDC, Satara
64	Shree Plast Industries, Addl. MIDC, Satara
65	The Ichalkaranji Sizing Co.Op.Society Ltd. Ichalkarnji
66	Shri Jayant Deo,1 Supriya Apartment,61/14 Erandvane, Pune
67	Top Gear Transmissions, Addl. MIDC, Satara
68	Siddhagiri Enterprises, Addl. MIDC, Satara
69	Standard Engineering Work, Satara
70	Shree Ram Engineering Works, Satara
71	Radhakrishna Engineering, Old MIDC, Satara
72	M-Square Technique, Satara
73	Sanjay Drilling & Tapping Works, Addl. MIDC, Satara
74	Turn Tech Automation Pvt. Ltd., Addl. MIDC, Satara
75	Shree Ganesh Engineering Works, Satara
76	Akshada Enterprises, Satara
77	Prasanna Enetrprises, Satara
78	Shivitej Engineering, Additional MIDC, Satara
79	Sagar Enterprises, Satara
80	Chandrakant Engineering, Addl. MIDC, Satara
81	Pooja Enterprises, Satara
82	Glorious Engineering Works, Satara
83	More Engineering, Satara
84	Jyoti Enterprises
85	Turn Personal

86	Ajinkya Engineering, Additional MIDC, Satara
87	Sai Krupa Engineering Works
88	Morya Engineering, Old MIDC, Satara
89	V. Tech Heat Treaters, Old MIDC, Satara
90	Indian Freedom Fighter & Heirs Association, 18/889, Ichalkaranji
91	DME (India) Pvt. Ltd., Shinoli Budruk
92	Shri Madan Parshuram Limaye,
93	Aam Aadmi Party –Erandavane, Pune
94	Sahyadri Engineers, Addl. MIDC, Satara
95	Allianz Polypack Industries
96	Vicky Engineering Works
97	Renuka Engineering Works
98	Amit Engineering Works, Addl. MIDC, Satara
99	Maruti Engineering
100	Kiran Industries
101	Dynamic Engineering Company, Addl. MIDC, Satara
102	A.T. Engineering Works, Addl. MIDC Area, Satara.
103	Shreelaxmi Drilling and Tapping Work
104	Shree Sai Enterprises
105	Shree Ganeshayan Engineering
106	Tanushree Engineering Work, Additional MIDC ,Satara
107	Gurudatta Industries, Adl. M.I.D.C., Satara - 415004
108	Radha Engineering
109	Manoj Enterprises
110	Bhairavnath Engineering, Additional MIDC, Satara
111	Ashadeep Enterprises
112	Shree Mahalaxmi Enterpriese
113	Prajval Enterprises
114	Shriram Enterprises
115	Vidyut Urja Equipments Private Ltd, Baner Road,Pune
116	Shri Vikrant Patil (Kinikar), Kolhapur Zilla Irrigation Fedration,Kolapur
117	Sahyadri Sahakari Sakhar Karkhana Ltd,Pune
118	Mayura Steels Pvt.Ltd. S. No-526,Shiroli MIDC, Kolhapur
119	Reliable Services
120	Shri. N.D.Patil, Maharashtra State Irrigation Federation, Kolhapur

121	Smt.Vinita Tatke & Smt.Rupali Ghate, Green Earth Social Development Consulting Private Ltd, Karve Nagar, Pune
122	The Ichalkaranji Co-op Spinning Mills Ltd, Shivanakwadi,Kolhapur
123	Yash Metalics Pvt.Ltd, Kolhapur
124	Osian Agro Automation Pvt.Ltd, Pune
125	Maharashtra Cold Storage Association, Sinhagad Road Pune.
126	Shri Kiran Maruti Tarlekar, Vita Yantramag Audyogik Sahakari Sangh Ltd.,Vita
127	Shri.R.K.Patil, Karveer Taluka Sahakari Dharan Va Pani Puravatha Sansthanch Sahakari Sangh Maryadit, Kolapur
128	Shri.Sakharam Naru Chavan, Karveer Taluka Sahakari Dharan Va Pani Puravatha Sansthancha Sahakari Sangh Maryadit, Kolapur
129	Kolhapur Zilla Sahakari Powerloom Association
130	Indira Gandhi Mahila Sahakari Soot Girani Ltd. Shivnakwadi ,
131	Tulaja Bhawani Cold Storage, D-37, MIDC Baramati , Pune
132	Jalaram Casting, MIDC Kagal - Hatkanangale, Kolhapur
133	S.B. Reshellers Pvt. Ltd. Shahupuri Kolhapur
134	Prime Industries, MIDC Gokul Shirgaon, Kolhapur
135	Shiroli Manufactures Association, Kolhapur
136	The Malegaon Power loom Action Committee, Malegaon
137	Taysons Inustries Pvt.Ltd, MIDC Miraj
138	Mahabal Auto Ancillaries Pvt.Ltd, G.M.Industrial Estate, Miraj
139	Shree Spherotech Pvt. Ltd. MIDC,Shiroli,Kolhapur
140	Jagdish Iron & Steels Pvt. Ltd. ,MIDC,Miraj
141	Durgade Engineering Works, MIDC, Miraj Sangli
142	FineTesting Machines Pvt. Ltd., MIDC Area Miraj
143	Fine Manufacturing Industires, ,MIDC Area,Miraj
144	Vimal Cement Pipes Industries , Old Kupwad Road, Miraj
145	Datta Shetkari Vinkari Sahakri Sut Girani Ltd. Ichalkarnji
146	Mahabal Metals Pvt. Ltd.,MIDC,Miraj
147	Nitin Industries, Additional MIDC, Satara
148	Sangali Miraj MIDC Manufactures Association, MIDC Industrial Area, Miraj Block,Miraj
149	Sahyadri Starch & Industries Pvt. Ltd, Plot No.A/6-7-8,MIDC,Miraj
150	SKOTAS India Pvt. Ltd, Kagal-Hatkanangale Kolhapur

151	Shubham Industries, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
152	Rohan Industries, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
153	Nesarkar Industries, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
154	Shree Ram Steels, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
155	Deepanajali Metals, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
156	New India Metals, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
157	Mahratta Chamber of Commerce,Industries and Agriculture (MCCIA), Senapati Bapat Road,Pune
158	Maharashtra Veej Grahak Sanghtana, Ichalkaranji
159	Food Processors,Cold Storers & Reefer Transporter's Association, Hadapsar,Pune
160	Belsteel Industries, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
161	Prerana Polymers, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
162	The Chandgad Taluka Chamber of Commerce & Industries, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
163	Samir Castings Pvt.Ltd, MIDC, Gokul Shrigaon,Kolhapur
164	Aqua Alloys Pvt.Ltd, Shinoli BK,Tal: Chandgad,Dist:Kolhapur
165	Rayat Plantations Pvt.Ltd, Madhavnagar Road,Sangali
166	Deccan Elastomers Pvt.Ltd, D-7, MIDC,Miraj Block, Miraj
167	Patson Elastomers, 145 Madhavnagar Road,Sangali
168	Patco Industrial Services, 63 Sangali-Miraj Road, Sangali
169	Solapur Industries Association , Chincholi, Solapur
170	Marvelous Metals Pvt. Ltd.,MIDC Gokul Shirgaon, Kolhapur
171	Sagareshwar Sahakari Soot Girani Maryadit, Kadegaon
172	NTB International Pvt.Ltd, 622/2,Kuruli,Near Chakan,Pune
173	Satyajeet Mechanisms, W-15, MIDC,Gokul Shirgaon,Kolhapur
174	Satyavijay Industries, D-65, MIDC,Gokul Shirgaon,Kolhapur
175	Shri. Dilip Narayan Ingale, Radhakrishana Colony, Post- R K Nagar,Kolhapur
176	L.K.Akiwate Industrial Co-Op Estate Ltd, Jaysingpur
177	Shri Madhukar Ghatpande, Laxminagar,Pune
178	Ghatge Patil Industries, Uchgaon,Kolhapur
179	Swastik Nets, 41 G.M Industrial Estate,Miraj
180	Pooja Packaging Industries
181	B.R Packaging, Miraj
182	Sudhaseet Engineers, Miraj
183	Shree Dattatraya Industries, Miraj

184	Ajit Laboratories Pvt.Ltd, Miraj
185	Shreeji Metaliks, W-7,MIDC Miraj
186	Swastik Flour Mill, Miraj
187	Swastik Industries, Plot No 101, Govinraoji Marathe Indl. Estate, Miraj
188	TNT Metals, 101, Govindraoji Marathe Indl. Estate, Miraj
189	Vasantdada Audhyogic Vasahat Sahakari Society Ltd. Sagali
190	Vision Engineers, Miraj
191	Adv. S.R. Nargolkar, JNPT
192	Adv.S.R.Nargolkar, Association of Hospitals in Pune
193	Adv.S.R.Nargolkar, Osho International Foundation, Pune
194	Adv.S.R.Nargolkar, Neo Sannyas Foundation, Pune
195	Adv.S.R.Nargolkar, College of Engineering, Pune
196	Adv.S.R.Nargolkar, Jamuna Vihar Co.op. Housing Society, Pune
197	Kolhapur Engineering Association, Kolhapur
198	Shri. Sanjay Patil, Subordinate Engineers Association
199	Shri V. S. Patani, Mahavir Jain Vidyalay
200	Shri. Bharat V. Shah, Mahavir Jain Vidyalay
201	Shri. S. M. Gadgil, MCCIA Pune
202	Shri. Ravi Shegunashi, SCF Jaysingh
203	Ms. Netra W. I,CES
204	Shri. Apoorve Bhatnagar,CES
205	Shri. Dhruv Dhiman,CES
206	Shri. Waval Bhupal
207	Shri. Dinesh S. Acharya,Pakshkar Sangh
208	Shri. P. A. Pande,NTPC
209	Shri. E.P. Rao,NTPC
210	Shri. Girish Patil,Infosys
211	Shri. Satish Patil,Ranjangam Industrials Association
212	Shri K.G. Muzumdar
213	Shri. Rahul Jadhav
214	Shri. Sunil Advani,Infosys
215	Shri. A. V. Bagwe,Century Enka
216	Shri. Unde Prasad
217	Shri. Jugal Rathi,Sajag Nagarik Manch
218	Shri. Rajan A. Mainkar,Gadve Marine Express

219	Shri. S. N. Shelke
220	Shri. S. R. Kashalkar,KEIPL
221	Shri. R. G. Tambe,S.S.K
222	Shri. Amit Jain, Xpro India Ltd.
223	Shri. Subodh Danawade, Venketeshwar Pvt. Ltd.
224	Shri. Bharat B. Tank, Pudurnjee Pulp & Paper Mills.
225	Shri. Lalji K. Durvedi, Pudurnjee Pulp & Paper Mills.
226	Shri. Rane, Pudurnjee Pulp & Paper Mills.
227	Shri. Jai Dharwardkar, Sakal Times
228	Shri. Bipin Revenkar, Maharashtra Cold Storage Association
229	Ms Shubhangi Acharya, AAP
230	Shri. Bhimsen Khedkar, Akhil Bhartiya Gram Panchayat
231	Shri. Vaibhavraj Kumtekar, Blue Bridge Township
232	Shri. Tanmay Chitale, Blue Bridge Township
233	Shri. Suryakant Patki , A.B.P.G
234	Shri. Jagat Singh Tanwar, AAP
235	Shri. Prafulla , AAP
236	Shri. Rahul Joshi, Global
237	Shri. Ann Prayas, Prayas
238	Shri. Ganje Samarth, Sakal
239	Shri. Raja Gaikawad, Samand Press
240	Shri. Ganesh Ange, Prabhat
241	Shri. Vijay S. Patil, Osho International Foundation
242	Shri. Mukesh, Osho
243	Shri. Walankar
244	Shri. Pankaj Kumar, Swarovski & RIA
245	Shri. Dhananjay Gaud
246	Shri. Narayankar R.S., Osho
247	Shri. Rakesh Iyer, Prayas EG
248	Ms Pournima Prabhakar, Prayas EG
249	Ms. Sarnya Varsha, Prayas EG
250	Shri. S. S. Karnere, FAP
251	Shri. Nilesh Hande, Pharande Promoter & Builder
252	Shri. R. Kule, Prachi Cold
253	Shri. Kushir M. R, MFRS Association Kagal

254	Shir. Watvil , ACG Capsule
255	Shri Ketan Mule, Praj Ind. Ltd.
256	Shri. Suresh Sancheti
257	Shri. Joshi
258	Shri Sagar Kanage
259	Shri S. S. Chandhari, P.M.C.
260	Shri. Dahibhale Vijay, P.M.C.
261	Shri. Salunke RC, P.M.C.
262	Shri. V. B. Dharurkar, Bharat Forge
263	Shri. Kamlesh Gogle
264	Shri. Amol Dahat, IEX
265	Shri. Makarand Patankar, POAA
266	Shri. Chandrakant Aurange, POAA
267	Shri. Bikram Chandhvi
268	Shri. Shivaji Shinde, Pudhari
269	Shri. S.V. Fadake
270	Shri. Ratan Choudhari
271	Shri. Maruti Choudhari
272	Shri. Gajanan Choudhari
273	Shri. Shivaji Choudhari
274	Shri. Babu Baban Choudhari
275	Shri. Vichare, POAA
276	Shri. Amol Machale, Lokmat
277	Prof. Anjali Dharme, COEP
278	Shri Ajay Shinde
279	Shri. Anil Babar

**Navi Mumbai Division**

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Dr. Ashok Pendse, Thane Belapur Industries Association
[B]	Objections / Suggestions by Consumers
2	Shri George John, Mumbai
3	Shri Sajid Husen Vakil Ahemad Ansari, Bhiwandi



4	Shri Nasimuddin Ansari,Bhiwandi
5	Shri Ashok Swami, Maharashtra Rajaya Sahakari Vastra Udyog Mahasagha Maryadit, Mumbai
6	Shri Atul Pandya, Hikal Ltd,Raigad
7	M/s Serene Properties Pvt. Ltd, Bandra,Mumbai
8	Shri Dilip Salvekar, Chamber of Small Industry Association, (COSIA), Thane
9	Shri Amit Kakkar, Galaxy Surfactants Ltd, Taloja, Raigad
10	Shri Sunil Kulkarni, Thane Small Scale Industries Association, TSSIA House, Thane
11	Urja Prabodhan Kendra, Jogeshwari East, Mumbai
12	Shri Vilas Bhoir, Worli, Mumbai - 400 018
13	Shri Soubhik Das, Marathahalli Bangalore
14	Shri S.K.Jena, Inox Air Products Ltd,Village Bhagad MIDC Industrial Area, Taluka: Mangaon, District: Raigad
15	Shri Prabhakar Renghe, Technova Imaging System (P) Limited MIDC Taloja, Dist. Raigad
16	Shri Dileep Parulekar, Taloja Manufactures' Association P-21, MIDC, Taloja, Tal: Panvel, Dist. Raigad -410 208
17	Shri John Pareira, Veej Grahak Sanghatana Vasai, Tal. Vasai, Dist. Thane 401 301
18	Shri Payas Machado, Nirbhay Jan Sanstha, Nandakhal, Post Agashi,Tal. Vasai, Dist. Thane - 401 301
19	Shri Manvel Tuskano, Janata Dal (Secular),Randive Wada, Parnaka, Tal: Vasai, Dist. Thane
20	City And Industrial Development Corporation Of Maharashtra Limited (CIDCO) CBD Belapur, Navi Mumbai
21	Shri Faizan Aazami, Maharashtra State Powerloom Federation, Bhiwandi
22	Shri Rustom Irani, The Seafood Exporters Association of India,Vashi, Navi Mumbai - 400 705
23	M/s Seasaga Enterprises Pvt Ltd.,TTC Industrial Area, Rabale, Navi Mumbai
24	Shri Vinod Nair,Naik Oceanic Exports Pvt. Ltd,Fort, Mumbai - 400 001
25	Castlerock Fisheries Pvt. Ltd.,MIDC, Taloja, Dist. Raigad
26	Shri Rosario D'souza,Dolphin Marine Foods & Processors (India) Pvt. Ltd. MIDC Taloja, Tal. Panvel, Dist. Raigad
27	Shri Uday Gupta, Mahindra Sanyo ,Mahim, Mumbai - 400 016
28	M/s Rizwan Ice & Cold Storage, MIDC, Kukshet, Navi Mumbai

29	Shri V.Y.Tamhane, The Millowners' Association, Dadar (West), Mumbai
30	M/s. Allana Cold Storage Pvt. Ltd. D-38, MIDC Industrial Area, Thane Belapur Road, Turbhe, Navi Mumbai
31	Shri Ajay Saraswat Frigorifico Allana Pvt. Ltd. Village Sarsan, Pen-Khopoli Road, Tal- Khalapure
32	Shri N.D.Patil, Maharashtra Rajya Irrigation Federation, Kolhapur Trade Centre, Kolhapur
33	Shri Girish Patel, Manoj Electric Works, Chincholi Dhobighat, Malad (E)
34	Shri Vikrant Patil, Maharashtra Rajya Irrigation Federation, Kolhapur Trade Centre, Kolhapur
35	Shri R.B.Deshmukh, Central Railway, Parcel Office Building, Mumbai
36	Shri Dilip Parasnis, Forstar Frozen Foods Pvt. Ltd., MIDC Industrial Area Taloja, Navi Mumbai
37	Shri N.B. Patil, Sonia Fisheries, Colaba, Mumbai - 400 005
38	Sumaraj Seafoods Pvt. Ltd, S B Singh Road, Fort, Mumbai - 400 001
39	M/s. Naik Frozen Food Pvt. Ltd.,Fort, Mumbai - 400 038
40	Shri S.S.Jhahagirdar.,Allana Investments & Trading Com Pvt. Ltd Plot No M- 41/42Taloja, Dist.- Raigad
41	Shri Ajit Thakur, Nanak Nutrition Food (Taloja) Pvt. Ltd.,Taloja, Dist. Raigad
42	Shri Abhijit Mukherjee, Shopping Centers Association of India Chincholi Bunder Link Road, Malad Mumbai
43	Captive Power Producers Association, A-25, MIDC Marol Industrial Area Road No 3, Andheri East Mumbai
44	Sonia Fisheries Pvt. Ltd., Plot No M 39, MIDC, Taloja Industrial Area, Tal- Panvel
45	Miss Pallavi Mulay, Alloy Steel Producers Association Of India Mukund Ltd, Belapur Road, Kalwe, Thane
46	Shri Harish Thaper, Navi Mumbai Cold Storage welfare Association,Vashi,Navi Mumbai
47	Shri Shakil Ansari Maharashtra Electricity Consumers Association, 55/5, Shop No 4, Murlidhar Compound Kalyan Road, Bhiwandi - 421 302
48	Shri R.S.Patwardhan, Envirocare Labs Pvt. Ltd. A-7, MIDC, Wagle Indl Estate, Main Road, Thane - 400 604
49	Shri Mahesh Yadav, Rexam HTW Beverage Can (India) Ltd MIDC Taloja Industrial Area, Dist. Raigad- 410208
50	Indepesca Overseas Pvt. Ltd

	M-03, MIDC, Taloja Dist. Raigad - 410 208
51	Shri G V Patil A-2/1 Chatanya Soc, Ganesh Nagar, Manpada Road, Dombivali (E) - 421 201
52	Ripening & Cold-Chain People 201-202 Iind Floor, Fruit Exporters Bldg, Apmc Ripenig Chamber, Fruit Market, Apmc Turbhe, Vashi - 400703
53	Shri Vishnu Babaji Gavli, Khanda Colony, New Panvel West
54	Shri Kiran Chaudhari, Vasai
55	Owens-Corning (India) Pvt. Ltd., Plot No T-28, MIDC Phase 2, Taloja, Dist- Raigad
56	All India Meat & Livestock Exporters Association (AIMLEA) 3rd Floor, Sidhwa House, Sasoon Dock, Colaba Fire Brigade, Mumbai
57	MADC, 8th Floor, World Trade Centre, Mumbai
58	Maharashtra Aquaculture Farmers Association, Nariman Point Mumbai
59	Shri S.G.Bhale, Institution of Engineers, Mahalaxmi, Mumbai
60	Retailers Association of India, Sahar Road, Sahar, Andheri(W), Mumbai
61	Shri S.C.Singh, Central Railways
62	Shri P.B.Behere, NTPC
63	Shri E.P.Rao, NTPC
64	Shri P.R.Dandekar, KCSS, Pune
65	Shri Jatin Parikh
66	Shri Savita Bhatia
67	Shri Pramod Mujumdar, Urja Prabodhan Kendra
68	Shri S.D.Bargir, Dolphin Marine Foods & Processors (India) Pvt. Ltd.
69	Shri D.R.Sukhtankar, Urja Prabodhan Kendra
70	Maharashtra Rajya Vastraudyog Mahasangh
71	Shri N.B.Patil
72	Shri C.S.Sapre
73	Shri N.J.Padalkar, MSPGCL
74	Shri N.A.Shingade, Libran Cold Storage
75	Shri D.P.Pakhpande, Mahindra Sanyo
76	Shri Ravi Kumar, Semarja Seafoods
77	Shri Haridas K.Nair
78	Shri Amitabh Saha, ASPA

79	Shri Sunil Bhosale
80	Shri Vikramaditya Kunji, Shroff Processed Food
81	Shri Aashish Vchavan, Seafood Association
82	Shri Jay Chotekar, Seafood Association
83	Shri Asalam Bhalucha, MAFA
84	Dr.Rajesh S.Damale, MAFA
85	Shri Abhijit Dhamdhere, IPPAI
86	Shri Soubh k. Das
87	Shri S.B.Pradhan
88	Shri P.C.Sheigd, CIDCO
89	Shri Santosh
90	Shri N.S. Ghorpade, RIL
91	Shri Zubair Nagari
92	Shri Allahrakha
93	Shri Vikram Yekhalkar, K Raheja
94	Shri Suhas Ambade, K Raheja
95	Shri Dilip B.Pote, T.M.A
96	Shri Kiran Kumbhe, Sakal
97	Shri Rizwan
98	Shri Siraj Dosani, Rizwan Ice
99	Shri Karim Kazi
100	Shri Faraz Dosani
101	Shri N.K.Navas, Sea Saga
102	Shri Nozar Mirza, Reliable Services
103	Shri Sandeep Donge
104	Shri R.R.Loyal
105	Shri R.B.Deshmukh, Indian Railways
106	Shri Yogesh Limaye, Sea Sagar
107	Shri rajan A.Mainkar
108	Shri Bapu Sule
109	Shri Ansari Aqeel
110	Shri Menkula Khan
111	Shri S.G.Bhale
112	Shri S.S.Shah
113	Shri H.S.Karengle

114	Shri Soubik Das, Prey Air
115	Shri V.M Bhvik
116	Shri S.B.Pawar
117	Shri S.P.Salvi
118	Shri Hemant Pasari,Kalash Aqua
119	Ms Pooja Gupta, Idam Infra
120	Shri M.J.Shah
121	Shri santosh Anand Shttay
122	Shri Sunil Padwihari
123	Shri S.K.Mital
124	Shri Vikas Patangia
125	Shri Pramod Garg
126	Shri Manish Garg
127	Ms Namrata Kadam, Punyanagri
128	Ms Neelam Baedee
129	Shri Rakesh Garg
130	Shri S.K.Jena, Inox AP
130	Shri G.V.Patil, MVGS
131	Shri Vishal S.Gholkar
132	Shri T.N.Agrawal
133	Shri Fahim Mobin Shaikh
134	Shri Mahindra Pratap Yadav
135	Shri Abu Talib
136	Shri S.M.Iqbal
137	Shri Misbha
138	Shri Anasari Ishfiyaque
139	Shri Anasari Imran