



## **TARIFF ORDER**

**Business Plan for the MYT Control Period FY 2015-16 to FY 2017-18**

**Petition No. 158/2015**

**And**

**Determination of ARR and Tariff for FY 2015-16**

**AND**

**Review for FY 2014-15**

**AND**

**Final True up for FY 2011-12 and FY 2012-13,**

**Petition No. 157/2015**

**Date 10.04.2015**

**For**

**Electricity Department, Government of Puducherry**

**JOINT ELECTRICITY REGULATORY COMMISSION**

**FOR GOA AND UNION TERRITORIES**

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## Contents

|           |  |           |
|-----------|--|-----------|
| <b>1.</b> | <b>Introduction.....</b>   | <b>14</b> |
| 1.1       | JERC Formation.....  | 14        |
| 1.2       | JERC Tariff Regulations .....  | 14        |
| 1.3       | Filing of Petition by the Electricity Department-Puducherry .....  | 14        |
| 1.4       | Admission of Petition .....  | 15        |
| 1.5       | Interaction with the Petitioner .....  | 15        |
| 1.6       | Public Hearing Process .....   | 16        |
| 1.7       | Approval of Business Plan.....   | 18        |
| <b>2.</b> | <b>Summary of Final Truing up for FY 2011-12 and FY 2012-13, Provisional True up for FY 2013-14, Annual Review for FY 2014-15 and ARR for FY 2015-16 to FY 2017-18 and Tariff Determination for FY 2015-16 to FY 2017-18 filed by the Petitioner .....</b> | <b>21</b> |
| 2.1       | Introduction.....  | 21        |
| 2.2       | Summary of Provisional True up for FY 2013-14.....   | 22        |
| 2.3       | Summary of the Review for FY 2014-15 filed by the Petitioner .....   | 23        |
| 2.4       | Summary of the ARR for FY 2015-16 to FY 2017-18 filed by the Petitioner.....   | 24        |
| 2.5       | Revenue Gap for the Control Period .....   | 25        |
| 2.6       | Summary of the Treatment of Regulatory Assets/Tariff Proposal for FY 2014-15 .....   | 26        |
| 2.7       | Prayer to the Commission .....   | 27        |
| <b>3.</b> | <b>Approach of the Order.....</b>  | <b>29</b> |
| 3.1       | Introduction.....  | 29        |
| 3.2       | Approach for Final True up for FY 2011-12 and FY 2012-13, Provisional True up for FY 2013-14 and Review for FY 2014-15 .....   | 29        |
| 3.3       | Approach for Determination of ARR & Tariff for FY 2015-16.....   | 31        |
| <b>4.</b> | <b>Summary of the objections received, EDP'S Responses and Commission's Views.....</b>   | <b>33</b> |
| 4.1       | Stakeholders Objections/Comments.....  | 33        |
| <b>5.</b> | <b>Final True up of FY 2011-12 and FY 2012-13 .....</b>  | <b>48</b> |
| 5.1       | Introduction.....  | 48        |
| 5.2       | Number of Consumers.....   | 48        |
| 5.3       | Energy Sales.....  | 49        |
| 5.4       | Intra State Transmission & Distribution Losses.....  | 51        |
| 5.5       | Energy Balance .....   | 52        |
| 5.6       | Power Purchase Quantum and Cost for FY 2011-12 and FY 2012-13 .....  | 53        |
| 5.7       | Power Purchase Cost.....   | 57        |
| 5.8       | Operation and Maintenance Expenses .....   | 58        |
| 5.9       | Repairs and Maintenance Expenses.....  | 60        |
| 5.10      | A&G Expenses.....  | 61        |
| 5.11      | Gross Fixed Assets .....   | 63        |
| 5.12      | Depreciation .....   | 64        |
| 5.13      | Interest and Finance Charges .....   | 65        |
| 5.14      | Interest on Working Capital.....   | 67        |
| 5.15      | Interest on Security Deposit .....   | 68        |
| 5.16      | Return on Capital Base/Net Fixed Assets .....  | 69        |
| 5.17      | Non-Tariff Income.....   | 70        |
| 5.18      | Revenue from Sale of Power at the Existing Tariff for FY 2011-12 and FY 2012-13 .....  | 71        |
| 5.19      | Aggregate Revenue Requirement for FY 2011-12 and FY 2012-13 .....  | 72        |
| 5.20      | Revenue Gap for FY 2011-12 and FY 2012-13 .....  | 73        |
| <b>6.</b> | <b>Provisional True up of FY 2013-14.....</b>  | <b>74</b> |
| 6.1       | Provisional True up of FY 2013-14.....   | 74        |

|  |            |
|--|------------|
| <b>7. Annual Performance Review for FY 2014-15.....</b>                    | <b>77</b>  |
| 7.1 Background.....  | 77         |
| 7.2 Number of Consumers.....   | 77         |
| 7.3 Energy Sales.....  | 78         |
| 7.4 Distribution Loss .....  | 79         |
| 7.5 Energy Requirement /Energy Balance for FY 2014-15 .....                | 80         |
| 7.6 Power Purchase Quantum and Cost.....                                   | 81         |
| 7.7 Renewable Purchase Obligation.....                                     | 84         |
| 7.8 Operation and Maintenance Expenses .....                               | 87         |
| 7.9 Gross Fixed Assets and Depreciation .....                              | 89         |
| 7.10 Interest and Finance Charges .....                                    | 91         |
| 7.11 Interest on Working Capital.....                                      | 92         |
| 7.12 Interest on Security Deposit .....                                    | 94         |
| 7.13 Provision for Bad Debts .....   | 96         |
| 7.14 Return on Capital Base .....  | 96         |
| 7.15 Non Tariff Income .....   | 97         |
| 7.16 Revenue from Sale of Power at Existing Tariff .....                   | 98         |
| 7.17 Aggregate Revenue Requirement (ARR) for FY 2014-15 .....              | 99         |
| 7.18 Revenue Gap.....  | 101        |
| 7.19 Recovery of Regulatory Asset:.....                                    | 101        |
| <b>8. Annual Revenue Requirement (ARR) for FY 2015-16.....</b>             | <b>104</b> |
| 8.1 Introduction.....  | 104        |
| 8.1.1 Submission by Electricity Department, Puducherry .....               | 104        |
| 8.2 Category-wise Energy Sales projections:.....                           | 104        |
| 8.3 Detailed Analysis of Energy Sales Projected:.....                      | 107        |
| 8.4 Transmission and Distribution Losses: .....                            | 115        |
| 8.5 Energy Balance .....   | 116        |
| 8.6 Power Purchase Quantum and Costs .....                                 | 117        |
| 8.7 Fixed Cost .....   | 130        |
| 8.8 Capital Investment and Capitalisation.....                             | 134        |
| 8.9 Capitalisation.....  | 134        |
| 8.10 Gross Fixed Assets and Depreciation .....                             | 135        |
| 8.11 Depreciation .....  | 135        |
| 8.12 Interest and Finance Charges .....                                    | 136        |
| 8.13 Interest on Working Capital.....                                      | 138        |
| 8.14 Provisions for Bad Debts.....   | 138        |
| 8.15 Interest on Security Deposit .....                                    | 139        |
| 8.16 Return on Capital Base/Net Fixed Assets .....                         | 140        |
| 8.17 Non Tariff Income .....   | 141        |
| 8.18 Revenue from Sale of Power at the Existing Tariff .....               | 142        |
| 8.19 ARR for the Control Period .....                                      | 143        |
| 8.20 Revenue Gap for FY 2015-16.....                                       | 144        |
| <b>9. Tariff philosophy and category-wise tariffs for FY 2015-16 .....</b> | <b>146</b> |
| 9.1 Preamble.....  | 146        |
| 9.2 Tariff Determination.....  | 146        |
| 9.3 Average Cost of Supply (ACoS) .....                                    | 149        |
| 9.4 Applicability of revised tariffs.....                                  | 150        |
| 9.5 Revenue at approved tariff for FY 2015-16 .....                        | 150        |
| 9.6 Treatment of Regulatory Assets .....                                   | 151        |
| <b>10. Determination of Open Access Charges.....</b>                       | <b>152</b> |
| <b>11. Directives .....</b>  | <b>159</b> |

|   |            |
|---|------------|
| <b>12. Conclusion of Commission's Order .....</b> | <b>176</b> |
| <b>13. Tariff Schedule.....</b>                   | <b>179</b> |

### **List of Tables**

|   |    |
|---|----|
| Table 1.1: List of Correspondence with PED .....  | 16 |
| Table 1.2: Public Notice Published by the Petitioner.....   | 16 |
| Table 1.3: Schedule of Public Hearing at Puducherry.....  | 17 |
| Table 1.4: Public Notice Published by the Commission .....  | 17 |
| Table 1.5: Repeat Public Notice Published by the Commission.....  | 17 |
| Table 2.1: Summary of final Truing up for FY 2011-12 and FY 2012-13 .....   | 22 |
| Table 2.2: Revenue Gap for FY 2011-12 and FY 2012-13 .....  | 22 |
| Table 2.3: APR of FY 2013-14 as per Tariff Order dated 25th April 2014 .....  | 23 |
| Table 2.4: Revenue Gap for FY 2013-14.....  | 23 |
| Table 2.5: Review of ARR for FY 2014-15.....  | 24 |
| Table 2.6: Revenue Gap for FY 2014-15 (Revised).....  | 24 |
| Table 2.7: Summary of ARR for FY 2015-16 to FY 2017-18 filed by the Petitioner.....   | 25 |
| Table 2.8: Calculation of Revenue Gap for FY 2013-14 to FY 2017-18 .....  | 26 |
| Table 2.9: Cumulative Gap calculation over the years .....  | 27 |
| Table 5.1: Number of consumers for FY 2011-12 and FY 2012-13 submitted by the Petitioner .....  | 48 |
| Table 5.2: Number of consumers Approved in final True up for FY 2011-12 and FY 2012-13 .....  | 49 |
| Table 5.3: Category-wise Energy Sales for FY 2011-12 and FY 2012-13 submitted by the Petitioner<br>(MU) .....                         | 50 |
| Table 5.4: Energy Sales Approved in True up for FY 2011-12 and FY 2012-13 (MU).....   | 50 |
| Table 5.5: Energy Losses Approved by the Commission for FY 2011-12 and FY 2012-13 .....   | 52 |
| Table 5.6: Energy Balance and Distribution Losses submitted by the Petitioner for FY 2011-12 and FY<br>2012-13 in final True up ..... | 52 |
| Table 5.7: Energy Balance Approved by the Commission in final True up for FY 2011-12 and FY 2012-<br>13 .....                         | 53 |
| Table 5.8: Power Purchase Quantum & Cost for FY 2011-12 .....   | 54 |

|   |    |
|---|----|
| Table 5.9: Approved Power Purchase quantum for FY 2011-12 in final Truing up .....                        | 55 |
| Table 5.10: Power Purchase Quantum and Cost for FY 2012-13 .....  | 56 |
| Table 5.11: Approved Power Purchase Quantum and cost for FY 2012-13 in final true up .....                | 57 |
| Table 5.12: Power Purchase Quantum and Cost approved for FY 2011-12 and FY 2012-13 in final true up ..... | 58 |
| Table 5.13: Employee Expenses submitted by PED for FY 2011-12 and FY 2012-13 .....                        | 58 |
| Table 5.14: Employee Expenses Approved for FY 2011-12 and FY 2012-13 .....                                | 60 |
| Table 5.15: R&M Expenses for FY 2011-12 and FY 2012-13 Claimed by PED .....                               | 60 |
| Table 5.16: R&M Expenses Approved for FY 2011-12 and FY 2012-13 (Rs. Cr) .....                            | 61 |
| Table 5.17: A&G Expenses for FY 2011-12 and FY 2012-13 .....  | 61 |
| Table 5.18: A&G Expenses for FY 2011-12 and FY 2012-13 .....  | 62 |
| Table 5.19: A&G Expenses Approved for FY 2011-12 and FY 2012-13 .....                                     | 62 |
| Table 5.20: O&M Expenses for FY 2011-12 and FY2012-13 .....   | 63 |
| Table 5.21: GFA for FY 2011-12 and FY 2012-13 submitted by the Petitioner .....                           | 63 |
| Table 5.22: GFA for FY 2011-12 and FY 2012-13 approved by the Commission .....                            | 64 |
| Table 5.23: Depreciation for FY 2011-12 and FY 2012-13 submitted by the Petitioner .....                  | 64 |
| Table 5.24: Depreciation Approved for FY 2011-12 and FY 2012-13 .....                                     | 65 |
| Table 5.25: Interest and Finance Charges for FY 2011-12 and FY 2012-13 .....                              | 66 |
| Table 5.26: Interest and Finance Charges Approved for FY 2011-12 and FY 2012-13 .....                     | 67 |
| Table 5.27: Approved interest on Working Capital for FY 2011-12 and FY 2012-13 .....                      | 68 |
| Table 5.28: Interest on Security Deposit for FY 2011-12 and FY 2012-13 .....                              | 68 |
| Table 5.29: Return on Capital Base for FY 2011-12 and FY 2012-13 submitted by the Petitioner .....        | 69 |
| Table 5.30: Return on Capital Base approved by the Commission (Rs. Cr) .....                              | 70 |
| Table 5.31: Return on capital base for FY 2011-12 and FY 2012-13 approved by the Commission .....         | 70 |
| Table 5.32: Non-Tariff Income submitted by the Petitioner .....   | 71 |
| Table 5.33: Non-Tariff Income Approved by the Commission for FY 2011-12 and FY 2012-13 .....              | 71 |
| Table 5.34: Revenue from the Existing Tariff approved for FY 2011-12 and FY 2012-13 .....                 | 72 |
| Table 5.35: Calculation of ARR for FY 2011-12 and FY 2012-13 .....  | 73 |

|   |    |
|---|----|
| Table 5.36: Revenue Gap approved by the Commission for FY 2011-12 and FY 2012-13.....                   | 73 |
| Table 6.1: ARR and revenue gap considered by the Commission for FY 2013-14 (Rs. Cr.) .....              | 75 |
| Table 7.1: Revised estimates of number of consumers submitted for FY 2014-15 (RE) .....                 | 77 |
| Table 7.2: Revised Category-wise Sales submitted for FY 2014-15 (RE).....                               | 78 |
| Table 7.3: Distribution Loss approved by the Commission for FY 2014-15 (RE).....                        | 79 |
| Table 7.4: Energy Balance projected by the PED for FY 2014-15(RE) .....                                 | 80 |
| Table 7.5: Energy Balance approved for FY 2014-15 (Revised Estimates).....                              | 80 |
| Table 7.6: Power Purchase Cost for FY 2014-15 submitted by the Petitioner .....                         | 82 |
| Table 7.7: Summary of Power Purchase Cost Approved by the Commission for FY 2014-15 .....               | 83 |
| Table 7.8: Renewable Power Purchase Obligation (RPO) submitted by the Petitioner FY 2014-15 ....        | 84 |
| Table 7.9: Renewable Power Purchase Obligation (RPO) Approved by the Commission for FY 2014-15<br>..... | 84 |
| Table 7.10: Employee expenses approved by the Commission for Review of FY 2014-15 .....                 | 87 |
| Table 7.11: Revised R&M Expenses for FY 2014-15 (Rs. Cr.) .....   | 87 |
| Table 7.12: Approved Revised R&M Expenses for Review of FY 2014-15 (Rs. Cr.).....                       | 88 |
| Table 7.13: A&G Expenses for FY 2014-15 (Rs. Cr.) .....   | 88 |
| Table 7.14: Approved Revised A&G Expenses for Review of FY 2014-15 (Rs. Cr) .....                       | 88 |
| Table 7.15: O&M Expenses for Review of FY 2014-15 approved by the Commission (Rs. Cr) .....             | 89 |
| Table 7.16: Gross Fixed Assets Submitted by the Petitioner for Review of FY 2014-15.....                | 89 |
| Table 7.17: Gross Fixed Assets approved by the Commission for Review of FY 2014-15 .....                | 90 |
| Table 7.18: Depreciation submitted by the Petitioner for Review of FY 2014-15 .....                     | 90 |
| Table 7.19: Depreciation Approved by the Commission for Review of FY 2014-15 .....                      | 91 |
| Table 7.20: Interest & Finance Charges for FY 2014-15.....  | 91 |
| Table 7.21: Interest Approved by the Commission for FY 2014-15.....                                     | 92 |
| Table 7.22: Interest on Working Capital Approved for FY 2014-15.....                                    | 94 |
| Table 7.23: Interest on Security Deposit for FY 2014-15 (Rs. Cr.).....                                  | 94 |
| Table 7.24: Interest on Security Deposit approved for Review of FY 2014-15 (Rs. Cr.).....               | 95 |
| Table 7.25: Status of provision of interest on security deposit (Rs. Cr.).....                          | 96 |

|   |     |
|---|-----|
| Table 7.26: Return on Net Fixed Assets for FY 2014-15.....  | 97  |
| Table 7.27: Return on Capital Base Approved by the Commission .....                                     | 97  |
| Table 7.28: Submitted Non Tariff Income for FY 2014-15 .....  | 98  |
| Table 7.29: Non Tariff Income approved for FY 2014-15.....  | 98  |
| Table 7.30: Submitted Revenue from Tariff for 2014-15.....  | 99  |
| Table 7.31: ARR for FY2014-15 as submitted by the Petitioner .....                                      | 100 |
| Table 7.32: ARR for FY 2014-15 (RE) approved by the Commission .....                                    | 100 |
| Table 7.33: Revenue Gap for FY 2014-15 (RE) .....   | 101 |
| Table 7.34: Status of Regulatory Asset as at the end of FY 2014-15 (Estimated) (Rs. Cr.) .....          | 102 |
| Table 8.1: Category-wise Number of Consumers (Actuals) for the Period FY 2010-11 to FY 2012-13<br>..... | 105 |
| Table 8.2: Category-wise sales (Actuals) for the Period FY 2010-11 to FY 2012-13 .....                  | 105 |
| Table 8.3: Number of consumers and sales projected by the Petitioner for FY 2015-16.....                | 106 |
| Table 8.4: Category wise Growth rate considered for sales from FY 2010-11 to FY 2013-14 .....           | 107 |
| Table 8.5: Energy Sales Projected for the Domestic Category for FY 2015-16.....                         | 108 |
| Table 8.6: Energy Sales Approved for the Domestic Category during the FY 2015 16 .....                  | 108 |
| Table 8.7: Energy Sales Projected for the Commercial Category for FY 2015-16.....                       | 109 |
| Table 8.8: Energy Sales Approved for the Commercial Category For FY 2015-16 .....                       | 109 |
| Table 8.9: Energy sales Projected for the Agriculture Category for FY 2015-16.....                      | 109 |
| Table 8.10: Energy Sales Approved for the Agriculture Category during the FY 2015-16 .....              | 110 |
| Table 8.11: Energy Sales Projected for the Street Lighting for FY 2015-16 .....                         | 110 |
| Table 8.12: Energy Sales Approved for the Street Lighting for FY 2015-16.....                           | 110 |
| Table 8.13: Energy Sales Projected for the LT Industry and Water Tanks for FY 2015-16 .....             | 111 |
| Table 8.14: Energy Sales Approved for the LT Industrial for FY 2015-16 (MU) .....                       | 111 |
| Table 8.15: Energy Sales Projected for the HT-I Industrial Category for FY 2015-16 .....                | 112 |
| Table 8.16: Energy Sales Approved for the HT-I Industrial for FY 2015-16.....                           | 112 |
| Table 8.17: Energy Sales Projected for HT-2 for FY 2015-16 .....  | 112 |

|  |                   |
|--|-------------------|
| Table 8.18: Energy Sales Approved for the HT-2 (State and Central Govt. Establishments) for FY 2015-16 .....   | 113               |
| Table 8.19: Energy Sales Projected for the HT-3 for FY 2015-16 .....   | 113               |
| Table 8.20: Energy Sales Approved for the HT-3 (Industrial Extra High Tension).....                            | 114               |
| for FY 2015-16.....  | 114               |
| Table 8.21: Projection of Consumption for FY 2015-16 by the Petitioner.....                                    | 114               |
| Table 8.22: Approved Category –Wise Sales for the FY 2015-16.....  | 115               |
| Table 8.23: Projected Distribution Loss by PED for FY 2015-16.....   | 115               |
| Table 8.24: T&D losses approved by the Commission for FY 2015-16 .....   | 116               |
| Table 8.25: Projected Energy Balance for FY 2015-16 .....  | 116               |
| Table 8.26: Approved Energy Balance for FY 2015-16.....  | 116               |
| Table 8.27: RPO Compliance Cost as Projected by the PED.....   | 120               |
| Table 8.28: Power Available and Power Procurement (MoD) for FY 2015-16 as projected by the<br>Petitioner ..... | 122               |
| Table 8.29: Power Procurement Cost projected by the Petitioner for FY 2015-16.....                             | 123               |
| Table 8.30: Renewable Purchase Obligation (RPO) Approved by the Commission for FY 2015-16 ...                  | 127               |
| Table 8.31: Power Purchase Quantum approved by the Commission for FY 2015-16.....                              | 128               |
| Table 8.32: Power Purchase Cost approved by the Commission for FY 2015-16.....                                 | 129               |
| Table 8.33: Power Purchase Quantum and Cost approved by the Commission for the                                 | FY 2015-16<br>130 |
| Table 8.34: WPI inflationary index for previous year .....   | 131               |
| Table 8.35: Inflation Index of O&M Expenses.....   | 131               |
| Table 8.36: Employee Expenses projected by the Petitioner for FY 2015-16.....                                  | 131               |
| Table 8.37 (A): Employee Expenses Gross Approved by the Commission for FY 2015-16 .....                        | 132               |
| Table 8.37 (B): Employee Expenses Net Approved by the Commission for FY 2015-16 .....                          | 132               |
| Table 8.38: Projected A&G Expenses for FY 2015-16 .....  | 132               |
| Table 8.39: A&G Expenses Approved for FY 2015-16 (Rs. Crore) .....   | 133               |
| Table 8.40: R&M Expenses projected by the Petitioner for FY 2015-16 .....                                      | 133               |
| Table 8.41: R&M expenses approved for FY 2015-16 (Rs. Crore).....  | 133               |



|  |     |
|--|-----|
| Table 8.42: O&M Expenses approved for FY 2015-16 (Rs. Crore) .....   | 134 |
| Table 8.43: GFA projected for FY 2015-16 (Rs. Crore) .....   | 135 |
| Table 8.44: GFA approved for FY 2015-16 (Rs. Crore) .....  | 135 |
| Table 8.45: Depreciation projected for FY 2015-16 (Rs. Crore) .....  | 135 |
| Table 8.46: Depreciation approved for FY 2015-16 (Rs. Crore) .....   | 136 |
| Table 8.47: Interest and finance charges projected for FY 2015-16 (Rs. Crore) .....                                    | 137 |
| Table 8.48: Interest and finance charges approved for FY 2015-16 (Rs. Crore) .....                                     | 137 |
| Table 8.49: Interest on Security Deposit projected for FY 2015-16 (Rs. Crore) .....                                    | 139 |
| Table 8.50: Interest on Security Deposit Approved for FY 2015-16 (Rs. Crore) .....                                     | 140 |
| Table 8.51: Return on Equity projected for FY 2015-16 (Rs. Crore) .....  | 141 |
| Table 8.52: Return on Capital Base approved for FY 2015-16(Rs. Crore) .....  | 141 |
| Table 8.53: Non-Tariff Income projected for FY 2015-16 .....   | 142 |
| Table 8.54: Non-Tariff Income approved for FY 2015-16 .....  | 142 |
| Table 8.55: Revenue at the Existing Tariff for FY 2015-16 proposed .....   | 142 |
| Table 8.56: Revenue at the Existing Tariff for FY 2015-16 approved by the Commission .....                             | 143 |
| Table 8.57: Projected ARR for FY 2015-16 (Rs. Crore) .....   | 143 |
| Table 8.58: ARR approved for FY 2015-16 (Rs. Crore) .....  | 144 |
| Table 8.59: Projected Revenue Gap for FY 2015-16 .....   | 144 |
| Table 8.60: Approved Revenue Gap for FY 2015-16 .....  | 145 |
| Table 9.1: Summary of existing and proposed tariff rates for FY 2015-16 .....  | 146 |
| Table 9.2: Tariff approved by the Commission for FY 2015-16 .....  | 148 |
| Table 9.3 Approved Tariff as a percentage of ACoS for FY 2015-16 .....   | 149 |
| Table 9.4: Revenue at approved tariff approved by the Commission for FY 2015-16 .....                                  | 150 |
| Table 9.5: Revenue Deficit at approved tariff by the Commission for FY 2015-16 (Other than<br>Regulatory assets) ..... | 150 |
| Table 10.1: Allocation of ARR between Wire Business and Retail Supply .....  | 152 |
| Table 10.2: Voltage-wise loss .....  | 153 |
| Table 10.3: Wheeling Charges for FY 2015-16 .....  | 153 |

|  |     |
|--|-----|
| Table 10.4: Calculation of 'C' based on ARR for FY 2015-16.....                      | 154 |
| Table 10.5: Calculation of 'C' based on ARR for FY 2015-16.....                      | 154 |
| Table 10.6: Allocation of ARR between Wheeling and Retail Supply for FY 2015-16..... | 155 |
| Table 10.7: Wheeling Charges approved from FY 2015-16 .....                          | 156 |
| Table 10.8: Calculation of "T" .....   | 157 |
| Table 10.9: Calculation of "C" .....   | 158 |
| Table 10.10: Approved Cross Subsidy Surcharge for FY 2015-16 .....                   | 158 |

**List of Abbreviations**

| <b>Abbreviation</b> |   | <b>Full Form</b>   |
|---------------------|---|--|
| A&G                 | : | Administration & General Expenses  |
| Act                 | : | The Electricity Act, 2003  |
| APR                 | : | Annual Performance Review  |
| ARR                 | : | Aggregate Revenue Requirement  |
| CAGR                | : | Compound Annualized Growth rate  |
| Capex               | : | Capital Expenditure  |
| CEA                 | : | Central Electricity Authority  |
| CERC                | : | Central Electricity Regulatory Commission  |
| COD                 | : | Commercial Operation Date  |
| Commission/JERC     | : | Joint Electricity Regulatory Commission for the state of Goa and Union Territories |
| CKt. Km             | : | Circuit Kilometer  |
| ED-P                | : | Electricity Department, Govt. of Puducherry  |
| D/C                 | : | Double Circuit   |
| DS                  | : | Domestic Supply  |
| EA 2003             | : | The Electricity Act, 2003  |
| FC                  | : | Fixed Charges  |
| FY                  | : | Financial Year   |
| GFA                 | : | Gross Fixed Assets   |
| HP                  | : | Horse Power  |
| HPP                 | : | Hired Power Plant  |
| HSD                 | : | High Speed Diesel Engines  |
| HT                  | : | High Tension   |
| JERC                | : | Joint Electricity Regulatory Commission for the state of Goa and Union Territories |
| kVA                 | : | Kilo Volt Ampere   |
| kWh                 | : | Kilo Watt Hour   |
| LPS                 | : | Late Payment Surcharge   |
| LT                  | : | Low Tension  |
| MU                  | : | Million Unit   |
| MW                  | : | Mega Watt  |
| MYT                 | : | Multi Year Tariff  |
| NDS                 | : | Non Domestic Supply  |
| NFA                 | : | Net Fixed Assets   |
| NTPC                | : | National Thermal Power Corporation   |
| O/H                 | : | Over head  |
| O&M                 | : | Operation & Maintenance  |

| <b>Abbreviation</b> |   | <b>Full Form</b>                       |
|---------------------|---|--|
| PLF                 | : | Plant Load Factor                      |
| RoE                 | : | Return on Equity                       |
| RPO                 | : | Renewable Purchase Obligation          |
| R&M                 | : | Repair & Maintenance                   |
| SCL                 | : | Sanctioned Connected Load              |
| S/C                 | : | Single Circuit                         |
| SBI PLR             | : | SBI Prime Lending Rate                 |
| SPCL                | : | Suryachakara Power Corporation Limited |
| T&D                 | : | Transmission & Distribution            |
| T.O.                | : | Tariff Order                           |
| UoM                 | : | Unit of Measurement                    |
| VAR                 | : | Volt Ampere Reactive                   |
| VC                  | : | Variable Charges                       |

Before the

**Joint Electricity Regulatory Commission for the State of  
Goa and Union Territories  
Gurgaon**

QUORUM<sup>1</sup>

S. K. Chaturvedi (Chairman)

**Petition No. 157/2015**

**Petition No. 158/2015**

**In the matter of**

Petition filed by Electricity Department, Puducherry for approval of Business Plan for the MYT Control period FY 2015-16 to FY 2017-18 and Aggregate Revenue Requirement for MYT Period FY 2015-16 to FY 2017-18 and Tariff for FY 2015-16

And

**In the matter of**

Electricity Department, Puducherry ..... Petitioner

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<sup>1</sup> As per Section 93 of the Electricity Act, 2003; no act or proceedings of the Appropriate Commission shall be questioned or shall be invalidated merely on the ground of existence of any vacancy or defect in the constitution of the Appropriate Commission. Therefore, Shri S K Chaturvedi the Chairperson of the JERC constituted the valid Quorum for the public hearing in respect of the Determination of the ARR & Tariff for FY 2015-16, due to vacancy in the position of member at that time.

**ORDER**

Date 10.04.2015.

## 1. Introduction

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### 1.1 JERC Formation

In exercise of the powers conferred by section 83 of the Electricity Act, 2003 the Central Government constituted a two member (including Chairperson) Joint Electricity Regulatory Commission for all Union Territories except Delhi to be known as “Joint Electricity Regulatory Commission for Union Territories” with headquarters at Delhi as notified vide notification no. 23/52/2003 – R&R dated May 2’ 2005. Later on with the joining of the state of Goa, the Commission came to be known as “Joint Electricity Regulatory Commission for the State of Goa and Union Territories” as notified on 30<sup>th</sup> May, 2008. The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Andaman & Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman & Diu, Lakshadweep and Puducherry) started functioning with effect from September 2008. Office of the Commission is presently located in the district town of Gurgaon, Haryana.

### 1.2 JERC Tariff Regulations

The Commission, in exercise of the powers conferred by the Electricity Act, 2003, has notified JERC (Terms and Conditions of Tariff) Regulations, 2009 for determination of tariff (hereinafter referred to as JERC Tariff Regulations). JERC has also notified JERC (Multi Year Distribution Tariff) Regulation, 2014. However the Commission has taken a decision to postpone the applicability of these Regulations. These Regulations will now be applicable for determination of tariff in all cases covered under these Regulations from 1st April, 2016 up to March, 2018 (i.e., FY 2015-18)

### 1.3 Filing of Petition by the Electricity Department-Puducherry

The Electricity Department of Government of Puducherry (hereinafter referred to as “ED Puducherry”, “EDP” or “PED”), a deemed licensee under Section 14 of the Electricity Act 2003, is in the business of distribution and retail supply of electricity in Puducherry, Karaikal, Yanam and Mahe regions of the Union Territory of Puducherry.

The Electricity Department, Puducherry has filed its petition for approval of Business

Plan on 1st October, 2014 and its petition for determination of Aggregate Revenue Requirement (ARR) for FY 2015-16 to FY 2017-18 & Retail Tariff for distribution and retail sale of electricity for FY 2015-16 to FY 2017-18 under Sections 61, 62 & 64 of the Electricity Act, 2003 on 2<sup>nd</sup> January, 2015.

As per the Terms & Conditions for determination of Tariff regulations, 2009 and MYT Regulations, 2014, PED was required to file the ARR and MYT Petition for the FY 2015-16 to FY 2017-18 by 30<sup>th</sup> November, 2014. However, the Petitioner submitted that there was delay in filing due to reasons as discussed below. And an Affidavit for extension was filed by the Petitioner before the Commission on 24th November, 2014:

- JERC was in the process of issuing order on MYT Business Plan submitted by PED on 30<sup>th</sup> September, 2014. However due to deferment of regulatory proceedings of Business Plan, the MYT petition also got delayed.
- Further Business Plan and MYT are for 3 years control period and hence proper strategy and planning is required to forecast operational and financial parameters for the control period. Moreover since many of the important parameters are linked to norms, approval from the Government is very crucial.
- The petition needs administrative and finance approval from Government of Puducherry also take considerable time to finalise/approve the said petition.

#### **1.4 Admission of Petition**

After initial scrutiny and analysis of the petition, the Commission admitted the petition on Business Plan, ARR for MYT Period & tariff determination for FY 2015-16 to FY 2017-18 on 06.01.2015 and numbered as petition No. 157/2015 for ARR & MYT petition and petition No. 158/2015 for Business Plan. The Petitioner was directed to publish the summary of the ARR petition and the tariff proposal in leading newspapers of the union territory and upload the petition on the website of the Petitioner. The copy of the Commission's letter dated 06.01.2015 stating the admittance of the petition is enclosed as **Annexure 1** to this order.

#### **1.5 Interaction with the Petitioner**

The Commission interacted regularly with the Petitioner to seek clarifications and

justification on various issues essential for the analysis of the tariff petition. The Petitioner submitted its replies, in response to the queries raised by the Commission's office, which have been considered for the computation of the ARR and the resultant tariff thereof, of the Petitioner. The technical validation session was held at the Commission's office on 13th February, 2015. The list of correspondence with EDP is tabulated below:

**Table 1.1: List of Correspondence with PED**

| <b>S. No.</b> | <b>Date</b> | <b>Subject</b>   |
|---------------|-------------|--|
| 1.            | 28.11.2014  | Deficiency note on the petition sent by the Commission   |
| 2.            | 12.12.2014  | Reply to the deficiency note   |
| 3.            | 04.03.2015  | Queries and additional data sought by the Commission after the technical validation session, sent vide email |
| 4.            | 04.03.2015  | Reply to the additional clarifications/data sought by the Commission   |
| 5.            | 16.03.2015  | Reply from the Petitioner  |

#### **1.6 Public Hearing Process**

The Commission directed the Petitioner to publish the summary of the ARR and Tariff proposals in the abridged form and manner, as approved by the Commission in accordance with Section 64 of the Electricity Act 2003. Accordingly, the public notice was published by the Petitioner for inviting objections/ suggestions on the petition from different stakeholders. Details of public notice are tabulated below.

**Table 1.2: Public Notice Published by the Petitioner**

| <b>S. No.</b> | <b>Date</b> | <b>Name of newspaper</b>         | <b>Place of circulation</b>          |
|---------------|-------------|----------------------------------|--------------------------------------|
| 1.            | 11.01.2015  | The New Indian Express (English) | Puducherry, Karaikal, Yanam and Mahe |
| 2.            | 10.01.2015  | DinaThanthi (Tamil)              | Puducherry and Karaikal              |
| 3.            | 10.01.2015  | Dina Malar (Tamil)               | Puducherry and Karaikal              |
| 4.            | 10.01.2015  | Malai Malar (Tamil)              | Puducherry and Karaikal              |
| 5.            | 17.01.2015  | Kerala Kaumudi (Malayalam)       | Mahe                                 |
| 6.            | 14.01.2015  | Janamitra (Telugu)               | Yanam                                |

Besides, the Petitioner also uploaded the public notice and the petition on its website ([www.electricity.puducherry.gov.in](http://www.electricity.puducherry.gov.in)). Interested parties / stakeholders were requested to file their objections / suggestions on the petition on or before



23.01.2015. The copies of the public notices are attached as Annexure 2 to this order.

The Commission published the notice for public hearing regarding approval of Aggregate Revenue Requirement (ARR) & tariff for FY 2015-16 to FY 2017-18 in leading newspapers giving due intimation to stake holders, consumers, objectors and the public at large about the public hearing to be conducted by the Commission as per the below mentioned schedule.

**Table 1.3: Schedule of Public Hearing at Puducherry**

| <b>Date &amp; Time</b>  | <b>Venue of Hearing</b>   | <b>Subject</b>   |
|---|---|--|
| 17 <sup>th</sup> February, 2015<br>1000 hours onwards<br>for all category of<br>consumers | Hall at Pondicherry<br>Multipurpose Social Service<br>Society (PMSSS) Complex,<br>#81, Laporte Street,<br>Puducherry – 605001 | Petition No. 157/2015 for Approval<br>of ARR & Determination of tariff for<br>FY 2015-16 to FY 2017-18 and<br>Petition No. 158/2015 for Business<br>Plan for FY 2015-16 to FY 2017-18 of<br>ED- Puducherry |

**Table 1.4: Public Notice Published by the Commission**

| <b>S. No.</b> | <b>Date</b> | <b>Name of newspaper</b>         | <b>Place of circulation</b> |
|---------------|-------------|----------------------------------|-----------------------------|
| 1.            | 04.02.2015  | The New Indian Express (English) | Puducherry & Chennai        |
| 2.            | 04.02.2015  | DinaThanthi (Tamil)              | Puducherry                  |
| 3.            | 04.02.2015  | Dina Malar (Tamil)               | Puducherry                  |
| 4.            | 04.02.2015  | Malaimalar (Tamil)               | Puducherry                  |

The copies of the public notices published by the Commission for intimation of public hearing are attached as **Annexure 3** to this order. The public notice / was also published on the website of the Commission ([www.jercuts.gov.in](http://www.jercuts.gov.in)). The repeat public notices for due intimation of the public hearing were published in the following newspapers, as shown in the table below:

**Table 1.5: Repeat Public Notice Published by the Commission**

| <b>S. No.</b> | <b>Date</b> | <b>Name of newspaper</b>          | <b>Place of circulation</b> |
|---------------|-------------|-----------------------------------|-----------------------------|
| 1.            | 15.02.2015  | The New Indian Express (English)  | Kochi                       |
| 2.            | 15.02.2015  | The New Sunday Express ( English) | Chennai                     |
| 3.            | 15.02.2015  | DinaThanthi (Tamil)               | Puducherry                  |
| 4.            | 15.02.2015  | Dina Malar (Tamil)                | Puducherry                  |
| 5.            | 15.02.2015  | Malaimalar (Tamil)                | Puducherry                  |

During the public hearing, each objector was provided an opportunity to present his views on the petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written objection or not, were given an opportunity to express their views. The list of objectors is attached as **Annexure 4** to this order.

The list includes the stakeholders:

1. Those who gave their written objections and did not intend to present orally during the public hearing.
2. Those who gave their written objections and expressed their desire to present orally also during the public hearing.
3. Those who gave their written objections but had not desired to express orally, but later chose to present orally also. They were also given an opportunity to present orally before the Commission during the public hearing.
4. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot.
5. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot and also gave written submissions

All these objections/suggestions were responded to by the Licensee in addition to written replies submitted later. Licensee submitted written replies to all written objections/suggestions of the stakeholders.

The issues and concerns expressed by the stakeholders have been examined by the Commission. The major issues discussed during the public hearing, the comments/replies of the utility and the views of the Commission thereon, have been summarized in **Chapter 4** of this order.

## **1.7 Approval of Business Plan**

The Petitioner – ED, Puducherry filed the petition for Approval of Business Plan for Control Period FY 2015-16 to FY 2017-18 on 01.10.2014 under Regulation 12.1 of the MYT Regulations 2014. The Petitioner under Regulation 12.1 of the MYT Regulations

2014 was required to submit the Business Plan by 30.09.2014. The Commission under Regulation 13.1 of the MYT Regulations 2014 was required to approve the Business Plan within 30 days from receipt of the complete business plan. Thereafter, as per Regulation 12.2 of the JERC MYT Regulations the Petitioner was required to submit MYT Petition for approval of ARR and Tariff for the Control Period of FY 2015-16 to 2017-18.

The Petitioner submitted the MYT Petition on 02.01.2015. The Commission analyzed the petitions. The petitions were found to be as per the Electricity Act, 2003 and the Regulations framed thereunder. The petition for approval of Business Plan and the MYT petition were admitted on 06.01.2015.

The Commission on 06.01.2015 decided to club both the petitions for approval of Business Plan and approval of MYT ARR and Tariff.

The Commission sent public hearing notices to all the concerned stakeholders and public at large by publication in four News papers on 04.02.2015 and repeat public notices were published in the same Newspapers on 15.02.2015.

The Commission held a joint Public Hearing of both the petitions for approval of Business Plan and approval of MYT ARR and Tariff on 17<sup>th</sup> Feb 2015 at hall at Pondicherry Multipurpose Social Service Society (PMSSS) Complex, #81, Laporte Street, Puducherry – 605001.

The Commission analyzed the petitions, representations of the stake holders and response received from the petitioner. The Commission observed that as per Regulation 22 (c) of the JERC MYT Regulations the Petitioner is required to submit detailed supporting documents with the petition for approval of Business Plan. The supporting documents should include among other data / information, the purpose of capital investment, capital structure, capitalization schedule, financing plan and cost benefit analysis. The Commission found that the Business Plan was not accompanied with these supporting documents.

Regulation 9 of the JERC MYT Regulations provides that some of the controllable

parameters determining tariff are linked with capital investment plan of the licensee. Therefore, approval of ARR on MYT frame work based on the capital investment plan submitted by the licensee without the supporting documents may affect the retail consumers adversely.

**Regulation 38 of the JERC MYT Regulations runs as under**

*“If any difficulty arises in giving effect to the provisions of these Regulations, the Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.”*

In the light of the above facts and circumstances, the Commission is of the opinion that it is not possible to approve the Business Plan for the control period FY 2015-16 to FY 2017-18 and consequently it is also not possible to approve MYT prepared on the basis of the Business Plan submitted by the petitioner for the control period FY 2015-16 to FY 2017-18. Hence the Commission has decided not to implement the JERC (Multi Year Distribution Tariff) Regulations, 2014 as provided under Regulation 38 for the control period FY 2015-16 to FY 2017-18. Further, the Commission has decided to proceed to approve ARR and determine tariff for FY 2015-16 only under JERC (Terms and Conditions for determination of Tariff ) Regulations, 2009.

## **2. Summary of Final Truing up for FY 2011-12 and FY 2012-13, Provisional True up for FY 2013-14, Annual Review for FY 2014-15 and ARR for FY 2015-16 to FY 2017-18 and Tariff Determination for FY 2015-16 to FY 2017-18 filed by the Petitioner**

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### **2.1 Introduction**

In exercise of the powers conferred on it. The Joint Electricity Commission for the State of Goa and Territories under Section 61 read with Section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, the Joint State Electricity Regulatory Commission for the State of Goa and Union Territories (JERC) notified the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 on 8<sup>th</sup> February, 2010 and subsequently notified the JERC (Multi Year Distribution Tariff) Regulations 2014, on 30<sup>th</sup> June, 2014. The JERC (Multi Year Distribution Tariff) Regulations 2014 are applicable to the State of Goa and the Union Territories of Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu, Lakshadweep and Puducherry from 1<sup>st</sup> April, 2015 up to March 31<sup>st</sup>, 2018 (i.e. till FY 2015-18).

The Electricity Department, Puducherry has filed its petition for determination of Aggregate Revenue Requirement for FY 2015-16 to FY 2017-18 and Tariff for FY 2015-16 to FY 2017-18 under Sections 61, 62 & 64 of the Electricity Act, 2003 and relevant provisions mentioned in JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and JERC MYT Regulations, 2014.

**As discussed at Para 1.4 of Chapter 1, after initial scrutiny & analysis of the ARR and Tariff Petition filed by the ED-Puducherry for FY 2015-16 to FY 2017-18, the petition was admitted subject to removal of infirmities to the extent possible. The Commission has taken the petition bearing No. 157/2015 on record.**

The summary of ARR for FY 2011-12 and FY 2012-13 proposed as against the approved figures of the Commission is provided in the table below:

Table 2.1: Summary of final Truing up for FY 2011-12 and FY 2012-13

(Rs. Cr)

| Particulars  | FY 2011-12             |                    | FY 2012-13             |                    |
|--|------------------------|--------------------|------------------------|--------------------|
|  | Approved by Commission | Claimed in True Up | Approved by Commission | Claimed in True Up |
| Cost of power purchase                                   | 1,095.08               | 1,097.74           | 893.23                 | 992.47             |
| Employee costs   | 54.15                  | 57.11              | 58.40                  | 65.27              |
| Administration and General expenses                      | 4.44                   | 4.00               | 4.84                   | 3.45               |
| R&M Expenses   | 16.17                  | 16.18              | 17.06                  | 9.92               |
| Depreciation   | 20.28                  | 17.87              | 23.39                  | 21.96              |
| Interest charges (including interest on working capital) | 7.87                   | 11.37              | 24.04                  | 15.49              |
| Return on NFA /Equity                                    | 9.33                   | 9.24               | 9.96                   | 9.74               |
| Provision for Bad Debt                                   | -                      | -                  | -                      | -                  |
| Interest on Consumer Security Deposit                    | -                      | -                  | -                      | -                  |
| <b>Total Revenue Requirement</b>                         | <b>1,207.32</b>        | <b>1,213.50</b>    | <b>1,030.92</b>        | <b>1,118.30</b>    |
| Less: Non Tariff Income                                  | 170.83                 | 170.83             | 51.88                  | 108.18             |
| <b>Net Aggregate Revenue Requirement</b>                 | <b>1,036.49</b>        | <b>1,042.67</b>    | <b>979.04</b>          | <b>1,010.12</b>    |

The Revenue Gap as approved by the Commission and as calculated on the basis of final True up of FY 2011-12 and FY 2012-13 is shown in the table below:

Table 2.2: Revenue Gap for FY 2011-12 and FY 2012-13

(Rs. Cr)

| Particulars                   | FY 2011-12 |          | FY 2012-13 |          |
|-------------------------------|------------|----------|------------|----------|
|                               | Approved   | Actuals  | Approved   | Actuals  |
| Aggregate Revenue Requirement | 1,036.49   | 1,042.67 | 979.04     | 1,010.12 |
| Revenue from Sale of Power    | 690.50     | 690.48   | 799.94     | 884.55   |
| Revenue Gap/(Surplus)         | 345.99     | 352.18   | 179.10     | 125.57   |

## 2.2 Summary of Provisional True up for FY 2013-14

The summary of the charges for FY 2013-14 claimed by the Petitioner in the last petition and as approved by the Commission in the last Tariff Order dated 25<sup>th</sup> April 2014 is tabulated below:

Table 2.3: APR of FY 2013-14 as per Tariff Order dated 25th April 2014

(Rs. Cr)

| Particulars   | FY 2013-14      |                        |                     |
|---|-----------------|------------------------|---------------------|
|   | Claimed in APR  | Approved by Commission | Provisional Actuals |
| Cost of power purchase including RPO Provision to meet obligation of the previous years | 984.77          | 1,002.78               | 994.04              |
| Employee costs  | 69.69           | 64.73                  | 72.70               |
| Administration and General expenses   | 3.96            | 3.96                   | 7.25                |
| R&M expenses  | 20.15           | 18.06                  | 13.46               |
| Depreciation  | 23.65           | 23.65                  | 23.38               |
| Interest & Finance Charges  | 4.53            | 13.88                  | 17.43               |
| Interest on Working Capital + Interest on Consumer Security Deposit                     | 8.39            | 7.18                   | -                   |
| Return on NFA @ 3% of NFA   | 9.85            | 9.87                   | 10.14               |
| Provision for Bad Debt  | -               | -                      | -                   |
| <b>Total Revenue Requirement</b>  | <b>1,125.00</b> | <b>1,144.11</b>        | <b>1,138.40</b>     |
| Less: Non Tariff Income   | 16.50           | 16.50                  | 28.28               |
| <b>Net Aggregate Revenue Requirement</b>  | <b>1,108.50</b> | <b>1,127.61</b>        | <b>1,110.13</b>     |

Table 2.4: Revenue Gap for FY 2013-14

(Rs. Cr)

| Particulars                   | FY 2013-14 |          |
|-------------------------------|------------|----------|
|                               | Approved   | Actuals  |
| Aggregate Revenue Requirement | 1,127.61   | 1,110.13 |
| Revenue from Sale of Power    | 1084.99    | 1,045.53 |
| Revenue Gap                   | 42.62      | 64.60    |

### 2.3 Summary of the Review for FY 2014-15 filed by the Petitioner

The EDP has submitted the Review for FY 2014-15 along with the MYT petition filed for ARR and Tariff for the FY 2015-16 to FY 2017-18 on 6<sup>th</sup> January 2015. While submitting the ARR and MYT Petition for FY 2015-16 to FY 2017-18, the EDP had considered 6 months actual data/ information for power purchase and sales for FY 2014-15 for the purpose of projection. The present filing for Review of FY 2014-15 is based on 6 months of provisional actual data/ information i.e. from April 2014 to September 2014. The ARR for next 6 months is estimated accordingly and revised estimates for FY 2014-15 have been prepared and submitted before the Commission for review.

Table 2.5: Review of ARR for FY 2014-15

| (Rs. Cr)  |                       |                        |                   |
|---|-----------------------|------------------------|-------------------|
| Particulars   | Claimed by Petitioner | Approved by Commission | Revised Estimates |
| Cost of Power Purchase  | 996.73                | 962.58                 | 973.43            |
| Employee Cost   | 76.28                 | 68.53                  | 75.32             |
| A&G Expenses  | 4.25                  | 4.19                   | 5.36              |
| R&M Expenses  | 20.56                 | 19.12                  | 19.12             |
| Depreciation  | 26.45                 | 26.45                  | 30.86             |
| Interest & Finance Charges  | 5.31                  | 15.63                  | 19.38             |
| Interest on working capital + Interest on Consumer Security Deposit | 10.81                 | 9.60                   | NIL               |
| Provision for Bad Debts   | Not claimed           | NIL                    | NIL               |
| Return on NFA@ 3 % of NFA   | 9.99                  | 10.00                  | 10.67             |
| Provision for interest on security deposit                          | -                     | 9.78                   | 4.00              |
| Less: Non-Tariff Income   | 0.50                  | 0.50                   | 4.87              |
| <b>Aggregate Revenue Requirement</b>                                | <b>1149.87</b>        | <b>1125.39</b>         | <b>1133.27</b>    |

Table 2.6: Revenue Gap for FY 2014-15 (Revised)

| (Rs. Cr)                              |                       |                        |                   |
|---------------------------------------|-----------------------|------------------------|-------------------|
| Particulars                           | Claimed by Petitioner | Approved by Commission | Revised Estimates |
| Aggregate Revenue Requirement         | 1149.87               | 1125.39                | 1133.27           |
| Revenue from Tariff (Excl. Surcharge) | 1080.67               | 1134.59                | 1142.72           |
| Revenue Gap/ (Surplus)                | 69.20                 | (9.20)                 | (9.45)            |

The ARR approved by the Commission in the tariff order dated 25.04.2014 for FY 2014 -15 was Rs. 1125.39 Cr. The Petitioner for the Review of FY 2014-15 has requested the Commission to approve the ARR of Rs 1133.27 Cr.

The revenue surplus for FY 2014-15, now claimed is Rs 9.45 Cr.

## 2.4 Summary of the ARR for FY 2015-16 to FY 2017-18 filed by the Petitioner

The Petitioner has submitted the estimates for FY 2015-16 to FY 2017-18 based on the past performance and expected changes in each element of cost and revenue for the ensuing year. EDP has studied the previous trends and taken cognisance of other internal and external developments to estimate the likely performance for FY 2015-16 to FY 2017-18.

The net ARR for FY 2015-16 to FY 2017-18 is respectively Rs.1301. 22 Cr, Rs. 1479.97



Cr and Rs. 1658.72 Cr and the net revenue from sale of power is Rs. 1213.10 Cr., Rs. 1291.23 Cr. and Rs. 1374.65 Cr. respectively.

The summary of the proposal is presented below:

**Table 2.7: Summary of ARR for FY 2015-16 to FY 2017-18 filed by the Petitioner**

| Sl. No.   | Item of expense  | (Rs. Cr.)<br>Proposed by licensee |                 |                 |
|-----------|--|-----------------------------------|-----------------|-----------------|
|           |  | FY 2015-16                        | FY 2016-17      | FY 2017-18      |
| 1         | Cost of power purchase                                   | 1,108.87                          | 1,250.59        | 1,384.50        |
| 2         | Employee costs   | 80.91                             | 86.91           | 93.36           |
| 3         | R&M expenses   | 18.35                             | 21.90           | 27.87           |
| 4         | Administration and General expenses                      | 5.76                              | 6.18            | 6.64            |
| 5         | Depreciation   | 35.21                             | 43.45           | 53.44           |
| 6         | Interest charges (including interest on working capital) | 24.87                             | 35.64           | 48.47           |
| 7         | Return on NFA /Equity                                    | 16.21                             | 21.94           | 28.81           |
| 8         | Provision for Bad Debt                                   |                                   |                 |                 |
| 9         | Interest on Consumer Security Deposit                    | 14.84                             | 17.32           | 19.80           |
| <b>10</b> | <b>Total Revenue Requirement</b>                         | <b>1,305.01</b>                   | <b>1,483.95</b> | <b>1,662.89</b> |
| 11        | Less: Non Tariff Income                                  | 3.79                              | 3.98            | 4.17            |
| <b>12</b> | <b>Net Revenue Requirement (11-12)</b>                   | <b>1,301.22</b>                   | <b>1,479.97</b> | <b>1,658.72</b> |

The Commission in the Tariff Order for FY 2013-14 also approved 10% surcharge in addition to the tariff. This surcharge collected was to liquidate the regulatory assets created in the tariff order dated 12<sup>th</sup> June, 2012 and subsequently revised on the basis of the audited accounts. A separate account for surcharge and regulatory assets is maintained by PED. The revised status of the regulatory assets as proposed by PED and is covered under Para 2.6 below.

## **2.5 Revenue Gap for the Control Period**

The EDP submitted that the said current petition covers 7 years which includes True-up for FY 2011-12 and FY 2012-13, Provisional True-up of FY 2013-14, APR of FY 2014-15 and MYT Control period from FY 2015-16 to FY 2017-18. However, the gap from FY 2011-12 to FY 2012-13 (including past gaps of FY 2009-10 to FY 2010-11) is adjusted against the recovery of the Regulatory Assets and therefore the Revenue Gap is calculated along with the additional adjustment from FY 2013-14 to FY 2017-

18 which is proposed to be recovered in the MYT Control period. PED submits that the increase in tariff shall be proposed considering the cumulative gap over the years. The calculation of revenue gap as proposed by EDP is shown below:

**Table 2.8: Calculation of Revenue Gap for FY 2013-14 to FY 2017-18**

| Particulars   | Previous Year<br>(Provisional) | Current Year<br>(RE) | (Rs. Cr)                      |               |               |
|---|--------------------------------|----------------------|-------------------------------|---------------|---------------|
|   |                                |                      | Ensuing Year<br>(Projections) |               |               |
|   | FY 2013-14                     | FY 2014-15           | FY 2015-16                    | FY 2016-17    | FY 2017-18    |
| Net ARR   | 1,110.13                       | 1,133.27             | 1,301.22                      | 1,479.97      | 1,658.72      |
| Less: Revenue at Existing Tariffs excluding Surcharge but including FPPCA | 1,045.53                       | 1,142.72             | 1,213.10                      | 1,291.23      | 1,374.65      |
| <b>Revenue Gap / (Surplus) for the year</b>                               | <b>64.60</b>                   | <b>(9.45)</b>        | <b>88.12</b>                  | <b>188.74</b> | <b>284.07</b> |
| <b>Opening Balance of Gap</b>   | <b>-</b>                       | <b>64.60</b>         | <b>133.24</b>                 | <b>221.37</b> | <b>410.11</b> |
| <b>Addition during the Year</b>   |                                |                      |                               |               |               |
| Gap during the corresponding year   | 64.60                          | (9.45)               | 88.12                         | 188.74        | 284.07        |
| <b>Additional Past Recoveries to be claimed in MYT period</b>             |                                |                      |                               |               |               |
| <i>Accumulated RPO to be purchase in MYT Period</i>                       |                                | 48.27                |                               |               |               |
| <i>Accumulated Interest on Security Deposit to be paid in MYT Period</i>  |                                | 29.82                |                               |               |               |
| <b>Total Cumulative Gap for years</b>                                     | <b>64.60</b>                   | <b>133.24</b>        | <b>221.37</b>                 | <b>410.11</b> | <b>694.17</b> |

## **2.6 Summary of the Treatment of Regulatory Assets/Tariff Proposal for FY 2014-15**

As specified under Tariff Order dated 12<sup>th</sup> June 2012, the recovery of the regulatory assets was initiated from FY 2013-14 onwards. PED submits that the calculation of regulatory assets has been revised as compared to the amount approved in Tariff Order dated 12<sup>th</sup> June 2012, 10<sup>th</sup> April 2013 and 25<sup>th</sup> April 2014 due to the fact that the current regulatory assets have been worked out based on the actual audited accounts for FY 2011-12 and FY 2012-13.

The calculation of the recovery of regulatory assets (10% surcharge) is carried out independently and has not been included in the revenue of the relevant year in which it was collected. Therefore, the gap of FY 2012-13 and FY 2013-14 is calculated purely on the basis of the revenue charged to the consumers excluding the surcharge calculated and the cost incurred in that corresponding year. The 10% surcharge as collected from consumers in FY 2013-14 and FY 2014-15 are adjusted against the regulatory assets which is the cumulative revenue gap from FY 2009-10 to FY 2012-13.

The calculation of the regulatory assets and the recovery of the same from the consumers are outlined in the following Table:

**Table 2.9: Cumulative Gap calculation over the years**

| (Rs. Cr.) |  |                      |                        |                     |
|-----------|--|----------------------|------------------------|---------------------|
| Sl. No.   | Item of expense  | Proposed by licensee | Approved by Commission | Revised by Licensee |
| 1         | FY 2009-10   | 59.54                | 59.54                  | 59.54               |
| 2         | FY 2010-11   | 96.19                | 96.19                  | 96.19               |
| 3         | FY 2011-12   | 371.00               | 346.01                 | 352.18              |
| 4         | FY 2012-13   | 151.87               | 179.10                 | 125.57              |
| 6         | Less : Government Support  | (360.00)             | (360.28)               | (360.28)            |
| 7         | <b>Regulatory Assets</b>   | <b>318.60</b>        | <b>320.55</b>          | <b>273.20</b>       |
| 8         | Recovery of Regulatory Assets from Consumers                                 |                      |                        |                     |
| a         | <i>FY 2013-14</i>  | 105.00               | 104.36                 | 101.76              |
| b         | <i>FY 2014-15</i>  | 108.00               | 113.19                 | 110.50              |
| 9         | <b>Total Estimated Regulatory Assets recovered</b>                           | <b>213.00</b>        | <b>217.55</b>          | <b>212.27</b>       |
| 10        | Proposed Recovery in FY 2015-16  | 105.60               | 103.00                 | <b>60.93</b>        |
| 11        | Proposed % Recovery in FY 2015-16 as additional Surcharge on existing tariff |                      |                        | <b>5.02%</b>        |

As can be analysed from the above table, against actual regulatory assets of Rs. 273.20 Cr. (based on the audited accounts), the actual recovery in FY 2013-14 and estimated recovery in FY 2014-15 will be Rs. 212.27 Cr. and therefore, the PED proposes to recover the balance regulatory assets in FY 2015-16 considering the revision in surcharge from 10% to 5.02%.

The PED requests the Commission to approve the recovery of regulatory assets in FY 2015-16 considering 5.02% Surcharge.

## 2.7 Prayer to the Commission

The Electricity Department, Government of Puducherry (PED) respectfully prays to the Commission to:

1. Condone the delay in submission of the Multi Year Tariff (MYT) petition.
2. Admit the petition seeking Final True up for FY 2011-12 and FY 2012-13, Provisional True Up for FY 2013-14, Annual Performance Review for FY 2014-15 and Multi-Year Tariff Petition for FY 2015-16 to FY 2017-18 as per the provisions of JERC (Multi Year Distribution Tariff) Regulations, 2014;

3. Approve the total recovery of Final True up of FY 2011-12 and FY 2012-13, Provisional True Up for FY 2013-14, Annual Performance Review for FY 2014-15 and Aggregate Revenue Requirement for FY 2015-16 to FY 2017-18 and other claims as proposed by PED along with the carrying cost.
4. Review the provisional actual performance of FY 2013-14, and approve the Aggregate Revenue Requirement (ARR), and gap for FY 2013-14, subject to final approval on the basis of true-up based on audited accounts.
5. Approve the consolidated gap till FY 2012-13 as regulatory assets as proposed in the petition and allow the balance recovery of the regulatory assets in FY 2015-16.
6. Approve the Aggregate Revenue Requirement (ARR), Expected Revenue from Charges (ERC) and the gap for MYT Control Period i.e. FY 2015-16 to FY 2017-18.
7. Allow cost related to accumulated RPO and past interest on security deposit into ARR of MYT Control Period of FY 2015-16 to FY 2017-18.
8. Exempt PED from submission of consumer category-wise cost of supply considering the submission made in the petition.
9. Grant approval for the schedule of tariff, charges for services and schedule of charges along with the surcharge as made in the petition for FY 2015-16 to FY 2017-18.
10. Exempt PED from introducing Time of Day (ToD) Tariff in FY 2015-16 for HT consumers.
11. Grant any other relief as the Hon'ble Commission may consider appropriate. The Petitioner craves leave of the Hon'ble Commission to allow further submission, addition and alteration to this petition as may be necessary from time to time.
12. Pass any other Order as the Hon'ble Commission may deem fit appropriate under the circumstances of the case and in the interest of justice.

The Petitioner declares that the subject matter of the petition has not been raised by the Petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any order in relation thereto.

### 3. Approach of the Order

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#### 3.1 Introduction

The Petitioner has submitted the ARR and Tariff Petition for MYT Period FY 2015-16 to FY 2017-18.

The Annual Performance Review for FY 2014-15 has been filed on the basis of the actual performance during the 1<sup>st</sup> half of the year and the revised estimates for the second half of the year. Further, the Petitioner has submitted the estimates for MYT Period FY 2015-16 to FY 2017-18 based on the past performance and expected changes in each element of cost and revenue for the ensuing year. The EDP has studied the previous trends and taken cognisance of other internal and external developments to estimate the likely performance for the MYT Period.

#### 3.2 Approach for Final True up for FY 2011-12 and FY 2012-13, Provisional True up for FY 2013-14 and Review for FY 2014-15

The Petitioner has submitted the Final True up for FY 2011-12 and FY 2012-13 based on Annual Audited Accounts for the respective year. The Performance Review of FY 2011-12 and FY 2012-13 was done by the Commission in the Tariff Order dated 10<sup>th</sup> April, 2013, for FY 2013-14 in the present petition. The Petitioner has prayed before the Commission to approve the ARR and revenue gap for FY 2011-12 and FY 2012-13 based on the audited accounts.

The PED has submitted that the audit of Annual Accounts for FY 2013-14 is in the process and has therefore submitted the provisional actuals for FY 2013-14 for provisional truing up.

Review for FY 2014-15 has been filed on the basis of the actual available data of the first half of the year and revised estimates for the second half of the year.

The True-up and Review of the respective years is to be carried out as per the

provisions of Regulation 8 of JERC Tariff Regulations, 2009, which is as under.

**Quote**

*“The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called*

*After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called ‘Truing Up’.*

*The Truing Up for any year will ordinarily not be considered after more than one year of ‘Review’.*

*The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.*

*While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.*

*For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control.*

*In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.*

*The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category.” Unquote*

The Petitioner has submitted the actuals for FY 2011-12 and FY 2012-13 based on Audited Accounts which will be considered as per JERC Regulations. For FY 2013-14, the Petitioner has submitted the unaudited provisional actual figures for the year for the approval of the ARR and Revenue Gap for FY 2013-14 subject to final adjustments at the time up true up once the audit of the annual accounts is completed.

In line with the above mentioned Regulation, the Commission has reviewed the variations between approvals and revised estimates of sale of electricity, income and expenditure for FY 2014-15 submitted by the Petitioner and permitted necessary adjustments/ changes in cases where variations are for reasonable and justifiable reasons.

The detailed analysis & treatment of each component is provided in Chapter 5, Chapter 6 and Chapter 7 of this Order.

### **3.3 Approach for Determination of ARR & Tariff for FY 2015-16**

In the determination of ARR & tariff for MYT Period, various provisions of the JERC's Tariff Regulations 2009 pertaining to business of the integrated utility are relevant and the Commission has been guided by the principles contained in Section 61 of the Act among other things to examine the sales forecast, power purchase quantum and other income & expenditure.

The Commission, while determining the tariff is guided by the principles contained in Section 61 of the Act, namely-

- a. The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
- b. The generation, transmission, distribution and supply of electricity are conducted on commercial principles;

- c. The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
- d. Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- e. The principles rewarding efficiency in performance;
- f. Multi-year tariff principles;
- g. That the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;
- h. The promotion of co-generation and generation of electricity from renewable sources of energy;
- i. The National Electricity Policy and tariff policy;

The Commission has also kept in mind the JERC (Procurement of Renewable Energy Regulations) 2010 for meeting the RPO requirements of the utility.

The Commission has considered the figures of income & expenditure as approved by the Commission in the previous tariff order(s) of the utility, actual data for H1 of FY 2014 -15 and revised estimates of FY 2014-15 to form the basis of projection for income and expenditure for FY 2015-16. Further, the Commission has relied on the audited figures of FY 2011-12 and audited figures of FY 2012-13, unaudited figures of FY 2013-14 and actual available figures of H1 of FY 2014-15 provided by the Petitioner and validated by the Commission during the technical validation session for the purpose of analysis of the ARR for FY 2015-16. The detailed analysis and treatment of each component is provided in Chapter 8 - Aggregate Revenue Requirement for FY 2015-16.

The tariff for various categories is so determined that it is in compliance of the various provisions of the Electricity Act 2003, Tariff Policy, National Electricity Policy and various Regulations of the Commission.



## 4. Summary of the objections received, EDP'S Responses and Commission's Views

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### 4.1 Stakeholders Objections/Comments

The issues raised by the public during the public hearing conducted on 17th February 2014 at Puducherry are as below:

#### 1. Shri. V.G. Nilavazhagan CPM has submitted the following:

- Department is under loss and no measures are indicated to reduce the loss. No action is taken against the direct theft. No action taken on Kanagadurga case in Yanam.
- No action is taken to reduce T&D Losses.
- No action is taken for disconnection of consumers having huge arrears, but Department is disconnecting ordinary consumers with small arrears of Rs. 1000/-
- Tariff increase will result in migration of industries.
- So much of surcharge apart from tariff.
- Meters recommended by the Department are sub-standard.
- PPCL is not operating the plant for non availability of Rs. 20.00 Crores to meet the maintenance.
- Privatization of the Department not to be done as it will steeply increase the tariff.
- Coal linkage and gas allocation to be obtained for increasing the own generation and to reduce the gap.
- Request the Commission to initiate action as required for development of UT with Industrial growth and for employment.

#### 2. Shri. K. Ravidran AAP has submitted the following:

- Puducherry is a small state and if the power allocation is utilized properly, it will lead to development of the state.
- Lot of theft of energy in Puducherry. Lot of industrial and commercial establishment are not coming because of the rigid attitude of the department officials.

**3. Shri. K. Murugan CPI has submitted the following :**

- In the last meeting it was decided to present Action Taken Report, but no such report has been submitted.
- In the meeting there are more officials than the public. Publicity is to be given from Junior Engineer Office.
- No action is taken to collect arrears from the Industries.
- Non collection of arrears are leading to the deficiency of the Department.
- The Department is not taking action for enhancement of transformers and conductors.
- What action is taken for repair/replacement of old sub-stations. In spite of the complaint, the department has not taken action to maintain the distribution transformer. When the Department is not maintaining, where is the necessity to collect the maintenance cost.
- Surcharges are more than the regular charges.
- Coal allocation and solar initiatives are not discussed.
- Earlier lots of subsidies were given to industries and there were lots of industries. Now several industries are closed. Government is not making salary payment to the employees of the several public sector undertakings, but department is disconnecting their services.
- The department application to be dismissed as it is against the interest of the public. Action Taken Report is to be published in all regional newspapers.

**4. Shri. B. Anathu Subiah Makkal Iyyakkam has submitted the following:**

- Not able to pay the existing tariff. Increase in tariff will cause hardship.
- Non disconnection of services with arrears in Lakh and Crore, but the disconnections are made for small amount of Rs. 1000/-.
- Any new industry in the last one year?
- Department meters and outside purchased meters are not functioning properly. Quality meter is to be used.
- Puducherry is a small state and requires subsidized tariff and the commission cannot interfere.

**5. Shri. V. Rajasekeran, BJP has submitted the following:**

- Interest on Security Deposit is not paid to the consumers.
- Salary drawn from budget but it is again shown under expenditure on Department side. Let us act as Department or Board and not in both ways.
- Public Relation Officer has not been appointed so far.
- Notice to the other side ie., to the public should be issued at least 10 days in advance.

**6. Shri. R.M. Bairavan, Karaikal Industries Forum has submitted the following:**

- 15% hike seems from the proposal.
- 45% of Industries are taking power as raw material.
- Power charges are highest in the Industrial category compared with other countries, resulting in increase in production cost thus becoming non-competitive.
- PPCL is closed for six months due to breakdown and power supply to industries is crippled.

**7. Shri. K. Lakshminarayanam MLA (Congress) has submitted the following:**

- Public is opposing to domestic tariff hike.
- Salaries are met from the budget. Hence salary has to be deducted till it becomes corporation.
- All Governments are giving subsidy to fill the gap between expenditure and revenue. Same should be done here.
- Stand of the Government is to be made public.
- All improvements are being passed on to consumers.
- Proposed to replace the street lights with LED lights. Hence, tariff has to be deferred till it is done.
- Department is borrowing money from outside at higher interest, there are several societies in Puducherry which are depositing in Bank at 6% interest rate. The same can be utilized for the Department work.
- Theft is not accounted properly particularly in outlying regions.
- Collection of arrears is not up to the mark.

- Fixed charges are unwarranted and to be deleted.
- Lots of Industries have closed. Excess power is not traded properly. Loss on account of less cost of sale should not be passed on to the consumers.
- Department has to find ways to increase revenue without disturbing domestic tariff.
- Demand side management has to be implemented.

**8. Shri. Annamalai, Representative of IT & ITES has submitted the following:**

- IT industry is categorized as Industrial but clubbed with commercial. A separate tariff is required.

**9. Shri. M. Narayanasamy, has submitted the following:**

- Public grievance meeting is not convened by the Department.
- Electricity Department is a Department or a Board?
- Salary is being paid by the Government. The salary cost is being received from the public, what is the necessity to increase the tariff.
- Lot of theft in rural areas and also in industries.
- Grievance meetings are being conducted now and to be continued.
- Fixed cost has to be withdrawn or properly explained.
- Works are not being carried out with proper care, loss on account of this is being passed on to the consumer instead of being recovered from their salaries.
- Power supply is given to Cell Phone towers without PPA approval but the power supply is not being extended to ordinary domestic service.
- Modification of cc bill has been done complaint lodged with the department with proof action needs to be taken.

**10. Shri. S. Kalidass, National Human Rights Organisation has submitted the following:**

- Higher secondary examinations are to be held. Hence, the power disconnection for non-payment of cc charges may be postponed for the time being.
- No salary for lots of employees in public sector undertakings. Power to be disconnected if the arrears are more than Rs. 7,500/-

- Power supply to be given for houses in Promoke land.

**11. Shri. Rajendran, Sumangala Steels has submitted the following:**

- Grave injustice is done to EHT consumers. Nowhere the EHT tariff is more than HT tariff. Demand charges increased by 20% in the year 2014-15. Tariff for EHT consumers has become more than tariff for HT consumer. Tariff is to be revised based on scientific norms.
- Salaries from budget to be treated as direct grant and revise the tariff.
- Power factor incentives to be restored to 1%.
- Load shedding has to be minimized, TOD metering to be introduced.
- FPPCA charges are to be claimed within 3 months of financial year closing.

**12. Shri. B. Krishnamourthy National Human Rights Organization has submitted the following:**

- The Street lights are burning in the day time also.
- Lots of government/Public sector undertakings are without salary. Hence, the disconnection may be deferred.
- Fans/lights are working in the Government department even in the absence of persons.
- Disconnections are done for non-payment of small arrears but the same is not implemented for big industries.
- Street lights in the Industrial Estate of Sederapet are not burning.

**13. Shri. Kalia Murugan, Lal Bahadur Sasthri Association has submitted the following:**

- Bill collection centre has been opened at Villianur area.
- Grievance meeting is being conducted in Division-IV O&M wise.
- Old HT/LT lines and transformers are to be replaced so that interruptions can be avoided.
- Hydraulic vehicle is not provided for Division-IV so Far.
- JERC meeting has to be conducted in rural areas also.
- Advertisement to be given along with public notice.

**14. Shri. R. Chanemougam has submitted the following:**

- Whether action is being taken on all the consumers for non payment of arrears.
- Agriculture and OHOB subsidy to be obtained from the Government and is not passed on to the consumers.
- All agriculture and OHOB are to be metered.
- Lines loss is more and no measures are indicated to reduce the loss.
- Measures taken to reduce KSEB power purchase cost.
- Proposal for buying power from Co-operative societies at higher cost. More time to be given for public hearing.

**15. Shri. Kumaravel has submitted the following:**

- Under RTI Rs. 28.00 Cr. is given as provision for bad debts, whereas no provision has been made from the same in the petition.
- No action taken for detection of theft of Energy. No study is also done.
- Some companies are not permitting others including the Electricity employees to enter into their premises.
- Steel Industries which have to pay Rs. 1 Cr. /day normally are now paying only Rs. 2 lakh/day due theft of energy.
- All 17 steel industries in Puducherry are involved in theft.
- Inspections are to be carried out to Sri Aurobindo Ashram for Theft of energy.
- Any squad formed for inspection of theft.

**16. Smt. R. Tamil Selvi has submitted the following:**

- Separate tariff has been fixed for advertisement hoarding company but the same is not implemented.
- Advertisement on poles is to be permitted whereas unauthorizedly it is being done now.

**17. Shri. V. Sundar, Dalit Sena G.Secy has submitted the following:**

- All expenditure and revenue statements are wrong. Revenue is shown as expenditure and expenditure has been shown as revenue.
- Cable operators to be taxed to get additional revenue to compensate 3% surcharge of 5% Surcharge.
- If Industries are billed properly the deficit will come down at least by 1%.

- Agriculture and OHOB consumers are being checked the balance 1% can be collected.

**18. Shri G. Ravichandiran, BJP has submitted the following:**

- Materials are not available in stores AE & JEs are spending their own money to attend to the defective street lights.
- Smart meters are not provided. Metering is of not good quality. All meters have to be replaced with good quality meters.
- There are about 880 Industries in Puducherry out of which 78 are heavy industries. 450 to 500 Industries have already left because of Electricity and other issues.

**Petitioner`s Submission:**

The Petitioner has submitted the following in written reply before the Commission, on the issues raised during the public hearing vide letter No. 326/ED/SE-I/EE-II/ARR/2014-15 dated 26.02.2015.

1. At the outset it is clarified that the Department had proposed to reduce the surcharge from 10% to 5% and to levy additional tariff of 7% for all consumers. Thus the net effect is only 2% hike which is very minimum. Even after the proposed hike the power tariff in Puducherry is less when compared to the neighbouring states in Southern region.
2. The Department is drawing the requirement of funds for salaries from the government budget. The Salaries recovered under ARR are ultimately going to the revenue of the Government of Puducherry, which is being spent for several development activities of Puducherry. The accounting principles of ARR are based on the commercial accounting applicable for company/corporates. Though most of the utilities in Union Territories are under Government, the ARR petition is being prepared on the commercial accounting principles and Puducherry is also following the same. It is further submitted that if the amount of about Rs. 80.00 Cr. provided for salaries is deleted now and added when the department becomes corporation, there will be sudden hike in tariff which will

result in more hardship to the public. Hence it is requested that the present arrangements may kindly be continued.

3. The Department has proposed to improve the infrastructure by availing loans under JICA and R-APDRP to bring down the T&D losses.
4. Under Part-A of R-APDRP the entire billing system of the Electricity Department is being revamped. The consumer's grievances like giving provision for online payment etc., will be taken care of once the billing system is revamped. The Part-A of R-APDRP is expected to be completed by August 2015.
5. The Department had already constituted Anti Power Theft Squad (APTS) which is conducting regular inspections of all the major installations. Apart from APTS, the Department had also constituted two inspection squads headed by Executive Engineers for carrying out inspections. It is submitted that the Department had also filed a petition before the Hon`ble JERC for certain clarifications on the Supply Code and its amendments. The petition was heard in August 2014, but the orders of the Hon`ble Commission are yet to be issued. Since the clarification sought have major impact on assessment of penalties, the orders may kindly be issued at the earliest. It is also submitted that in the case of theft energy by M/s. Kannagadurga castings Pvt. Limited, Yanam the Hon`ble High Court Madras has held that the format issued for initial assessment is not in accordance with the provision of Electricity Act and supply code and directed the department to issue fresh notice and proceed further in accordance with the provisions of supply code. The Department has issued initial notice on 11-09-2014 for an amount of Rs. 28, 54, 61,316/-. The objections given by the consumer were heard in person on 28-10-2014 and the final notice was issued for an amount of Rs. 24,01,16,927/- on 04-11-2014. Since the consumer has not paid the amount the same was included as arrears in the cc bill and the department is taking further action to recover the arrears in accordance with the provisions of the law.
6. The MYT petition has been filed only after obtaining the approval of the competent authority. Hence the Government is also aware of the proposed tariff hike.



Further, the Petitioner vide letter No. 331/ED/SE-I/EE-II/F-ARR/2014-15 dated 06.03.2015 has submitted before the Commission the replies to objections raised on ARR and Tariff petition filed by EHT consumers as given below.

**Objection 1:** The EHT consumers are drawing power at higher voltage level of 110 KV with less transmission losses. Since the losses are less the tariff should also be less when compared with HT industries. Nowhere the EHT tariff is more than the HT tariff and has requested for revision of EHT Tariff.

**Reply:**

It is technically accepted that the EHT losses are less when compared with other categories of power supply. But the line loss alone cannot be a factor in deciding the tariff of a particular category of consumer. The Department has submitted the reply to the Hon'ble JERC on the above lines in the petition filed by the EHT consumers for review of EHT tariff in the Tariff Order 2014-15 of the Hon'ble JERC. The Hon'ble commission had agreed with the views of the department and dismissed the review petition of the EHT consumers. The HT and EHT industrial tariff in other southern states is furnished below:

Approved Tariff Order schedule for 2014-15 & Comparison with other state states

| Sl. No    | Category                     | Existing tariff for FY 2014-15 | Tariff Order of TANGEDCO (14-15) | Tariff Order for Hubli Electricity Bangalore (14-15) | Tariff Order for KSEB (13-14) | Tariff Order Andhra Pradesh (13-14) |
|-----------|------------------------------|--------------------------------|----------------------------------|--|-------------------------------|-------------------------------------|
| <b>A)</b> | <b>HT :</b>                  |                                |                                  |  |                               |                                     |
| (i)       | Demand Charges per KVA/month | Rs.220                         | Rs.350                           | Rs.180   | Rs.300                        | Rs.350                              |
| (ii)      | Energy Charges per KWh       | Rs.4.70                        | Rs.8.00                          | Rs.5.75  | Rs.5.20                       | Rs.5.73                             |
| <b>B)</b> | <b>EHT :</b>                 |                                |                                  |  |                               |                                     |
| (i)       | Demand Charges per KVA/month | Rs.240                         | Rs.350                           | Rs. 180  | Rs.290                        | Rs.350                              |
| (ii)      | Energy Charges per KWh       | Rs.4.70                        | Rs.8.00                          | Rs.6.15  | Rs.4.80                       | Rs.4.90                             |

Hence the Hon'ble Commission may take final decision of the tariff issue.

**Objection 2:** The incentive for the power factor improvement has been reduced from 1 % to 0.5 %. The reduction of incentive is upsetting their capital investment plan.

**Reply:**

The incentive given for better power factor from the year 2012-13 is reproduced below:

**FY 2013-14 & FY 2014-15:**

"In case the monthly average power factor rises above 95% (0.95 lagging), a power factor incentive @ 0.5 % on demand and energy charges shall be given for each increase of 0.01 power factor above 0.95 (lagging)".

In simple terms, the incentives as per the tariff order 2012-13 for increase of Power factor from 0.95 to 1 is 5 %, whereas the existing incentives is 2.5 %. If the request of the Petitioner is considered the Department will have to pay additional 2.5 % incentives to all the HT and EHT consumers. It is not out of way to inform that the net tariff hike for the Year 2015-16 is only 2 % (reduction in surcharge (-5%) + proposed -increase in tariff (+7 %)). Hence giving additional incentives of 2.5 % is not possible. If the request is considered, it will actually results in reduction of the existing tariff.

**Objection 3:** Lesser tariff to be introduced for off peak consumption:

**Reply:**

Since the present billing software is not compatible for introduction of TOD metering, the Department has requested the Hon'ble Commission one year time for implementation of TOD meters. The request of the consumers will be considered in the tariff petition of 2015-16.

Further, the Petitioner also submitted before the Commission vide letter No. 332/ED/SE-I/EE-II/F-ARR/2014-15 dated 06.03.2015 the reply to the objections raised by Thiru. Arunsatesh Kumar, Puducherry on ARR and Tariff petition filed as given below.

**Objection 1: The PED is supplying electricity beyond its area of Supply i.e. to neighbouring states:**

It is informed that about 225 services under different categories have been effected in the adjoining areas of the neighbouring states.

In this context, it is inform that the total number of service connection extended from UT of Puducherry to the neighbouring states is very meager, providing separate tariff for the above service connections will again lead to confusion in the billing.

It is submitted that all the above consumers were effected before the formation of Hon'ble JERC and also based on the power availability to the states under the provision of I.E. Act 1910 and Electricity (Supply) Act 1948.

**Objection No. 2: The PED is not segregated into the wheeling and supply business.**

The Amendment to Supply Act is under consideration of the Lok Sabha. Hence it is too early to comment on the wheeling and supply business.

**Organising The Mahe, Karaikal, Puducherry and Yanam Regions as cost centres.  
(as directed by Hon'ble Commission in the Tariff order for FY 2009-10)**

Department had already submitted to Hon'ble Commission that maintaining separate regional cost centre is not economically viable and the Hon'ble commission had accepted the Department's submission.

**Objection No. 3: The PED has not filed 4 (Four) Separate ARR and Tariff petitions for Puducherry, Karaikal, Mahe and Yanam respectively.**

It is the policy of the Government of Puducherry to have uniform tariff for all the four regions of Union Territory. Hence the objection is not viable to be considered.

**Objection No. 4: Non-Core activities of PED / Licensee**

The cost of employees in Division-III who are maintaining the other Government buildings have already been deleted and are not included in the expenses under MYT petition.

Regarding maintenances of street lights, it is informed that the employees who are renewing the fuses of house hold services and maintaining the HT/LT system are also maintaining the street lights. It is not possible to segregate the cost of staff for maintenance of Street lights.

The cost of deputation staff is not included in MYT petition.

**Objection No. 5: The PED has more Man Power**

Copies of the extract of the Annual report 2013-14 on the performance of SEBs of the Planning Commission Publication are annexed. This statement shows Puducherry is better position when compared with many other State Electricity Boards.

**Objection No. 6: The PED is a Government Department**

The electricity Department being a Government Department, entire revenue of the Department goes to the Government account and the expenditure of the Department including salaries is being met from the Government Budget, the objection is viable to be implemented only when the Department has got its own account.

**Objection No.7: The PED has more than one lakh of un-metered consumers**

The Hon'ble JERC is already following the action taken by each utility in providing meters to all consumers. Orders of Hon'ble Commission will be complied with.

**Objection No.8 :- The PED has not prepared & served bills and collected amounts from consumers**

The Department had already been issuing bills for OHOB consumers in some areas like Yanam and Mahe and bill be issued for other regions of Puducherry and Karaikal shortly.

**Objection No. 9 : The PED has not paid interest amount on Security Deposit to the Consumers.**

The interest on Security Deposit to all the HT consumers is being paid regularly. In case of LT consumers, the interest on Security Deposit for the year 2012-13 and 2013-14 had already been paid in Division-I in Puducherry region and in Mahe and Yanam region.

**Objection No. 10 : The PED has not prepared ARR & Tariff with Correct Technical data's / particulars**

The ARR petition has been prepared strictly in accordance with JERC Regulations.

**Objection No. 11: The PED has established CGRF with unqualified Chairman & Members but paying Huge Salaries**

Does not pertain to Multi Year Tariff.

As per the Electricity Act 2003, it is mandatory for the re-organisation of Boards into companies, no such compulsion is there for Licensee. When State Government take decision for re-organisation of Board as per the Electricity Act 2003, the SERC may give advice under section 86(2) of Electricity Act 2003 . Hence the request of the Petitioner to issue Su-Moto orders under section 86(2) of Electricity Act 2003 may not be legally sustainable.

**Commission`s Analysis**

The Commission has noted the objections of the stakeholder's and also submissions of the Petitioner on the same.

1. The Commission observes that most of the issues raised by the objectors relate to local issues of Puducherry which the Electricity Department, Puducherry has to resolve, instead of issues related to the petition listed.

As regards the quality of supply, the Commission has noted the grievances of the stakeholders. The Commission has notified the JERC (Standards of Performance) Regulation, 2009, wherein the guaranteed and overall standard of performance

to assure quality of supply is enshrined. The Petitioner is bound to adhere to the Regulations prescribed and impart the stipulated performance standards.

Redressal of consumers complaints and grievances is an important function and responsibility of the distribution licensee, therefore the PED must pay due attention to it. The Commission has put in place an appropriate mechanism for redressal of consumer grievances. Consumer Grievance Redressal Forum (CGRF) is functioning at various levels. Besides that, an Ombudsman is also functional at the JERC office. The PED needs to give due publicity to the said Forum and its redressal mechanism so that the general public is made aware of the same. The PED should work towards the goal of greater consumer satisfaction, adopt a proactive approach and settle consumers complaints in a professional, time bound manner and should make themselves available whenever need be. The Commission directs the PED to create awareness amongst the consumers on the standards of performance notified by the Commission and arrange to publish the standards of performance/ salient features of supply code and distribution code in all leading newspapers and in the vernacular, in simple language i.e. understandable to the general consumer.

The Commission directs the PED to convene periodic public grievance meetings once in every month to redress consumer related issues.

2. The Commission reiterates that its earlier directive on collection of arrears has to be adhered to. The Petitioner must submit quarterly progress report on the status of the collection of arrears along with an action plan for liquidating the arrears.
3. The Commission had earlier issued a directive on the replacement of non functional meters in the last tariff order. The Petitioner has not fully complied with the directive and so the Commission reiterates its earlier directive and wants the Petitioner to fully comply with it.
4. With regard to reduction of T&D losses, the Commission directs the Petitioner to conduct DT wise energy audit and anti-theft drives in the high loss level areas and submit the quarterly report to the Commission.

5. Regarding Tariff increase, as per the Electricity Act, 2003 and JERC Tariff Regulations, the Commission has to determine the Annual Revenue Requirement of the Distribution Licensee every year based on which the Tariff has to be regulated such that the Distribution Licensee can function smoothly and discharge its functions efficiently and serve the consumers in a better way. In this order, the Commission has analysed and determined the various components of the ARR keeping in view the JERC Regulations and prudence. Tariff is accordingly adjusted based on the revenue gap thus arrived for FY 2015-16.
6. The Commission has already directed to pay the interest on security deposit to LT consumers also promptly which has to be complied and the latest status regarding payment of interest on security deposit as on 31st March, 2015 shall be reported by 30th June 2015.
7. As regard to abolishing fixed charges, the fixed charges are provided to meet the fixed cost of the Distribution Licensee to some extent, if not fully. The utility has to pay fixed charges to the generators for purchase of power and also has to create and maintain adequate distribution network to serve the consumers effectively. Therefore, the fixed charges cannot be removed.

## 5. Final True up of FY 2011-12 and FY 2012-13

### 5.1 Introduction

The True up of FY 2011-12 and FY 2012-13 is to be carried out as per the provisions of Regulation 8 of JERC Tariff Regulations, 2009.

The Commission, in its Tariff Order dated 25<sup>th</sup> April, 2014, had directed the PED to file the True up Petition, along with the Audited Annual Accounts, to revisit the gap for FY 2012-13. Accordingly, the PED has filed in its Petition for final True up for FY 2011-12 and FY 2012-13, provisional True up of FY 2013-14 and Performance Review for FY 2014-15 and Aggregate Revenue Requirement (ARR), with Tariff proposal for MYT Control Period from FY 2015-16 to FY 2017-18. The PED, in its Petition for True up for FYs 2011-12 and 2012-13, has furnished the actual Energy Sales, Expenditure and Revenue for FY 2011-12 and FY 2012-13, based on the Audited Annual Accounts. The Truing up submitted is based on the comparison of the actual performance of FY 2011-12 and FY 2012-13 with the revised estimates of FY 2011-12 and FY 2012-13 in the Tariff Order dated 10<sup>th</sup> April, 2013.

The Commission has analysed the components of the actual Energy Sales, Expenses, Revenue and Gains and Losses under Truing up for FY 2011-12 and FY 2012-13.

### 5.2 Number of Consumers

#### Petitioner's Submission

The Petitioner has submitted the number of consumers for FY 2011-12 and FY 2012-13. The details are given in the Table below:

**Table 5.1: Number of consumers for FY 2011-12 and FY 2012-13 submitted by the Petitioner**

| S. No | Consumer Categories      | FY 2011-12             |                | FY 2012-13             |                |
|-------|--------------------------|------------------------|----------------|------------------------|----------------|
|       |                          | Approved by Commission | Actuals        | Approved by Commission | Actuals        |
| 1     | Domestic & Cottage       | 281,903                | 281,903        | 300,432                | 293,742        |
| 2     | Commercial               | 41,943                 | 41,943         | 43,144                 | 43,479         |
| 3     | Agriculture              | 6,828                  | 6,828          | 6,810                  | 6,859          |
| 4     | Public lighting          | 48,384                 | 48,384         | 49,438                 | 48,485         |
| 5     | LT Industrial            | 6,035                  | 6,035          | 6,142                  | 6,142          |
| 6     | Temporary supply - LT&HT | -                      | -              | -                      | -              |
|       | <b>Total LT</b>          | <b>385,093</b>         | <b>385,093</b> | <b>406,034</b>         | <b>398,707</b> |
| 7     | HT 1 Industrial          | 308                    | 308            | 412                    | 361            |
| 8     | HT Commercial            | 93                     | 93             | -                      | 58             |



| S. No | Consumer Categories             | FY 2011-12             |                | FY 2012-13             |                |
|-------|---------------------------------|------------------------|----------------|------------------------|----------------|
|       |                                 | Approved by Commission | Actuals        | Approved by Commission | Actuals        |
| 9     | HT 2 - Government & water tanks | 43                     | 43             | 41                     | 45             |
| 10    | HT 3 – EHT                      | 7                      | 7              | 7                      | 7              |
|       | <b>Total HT</b>                 | <b>451</b>             | <b>451</b>     | <b>460</b>             | <b>471</b>     |
|       | <b>Total LT and HT</b>          | <b>385,544</b>         | <b>385,544</b> | <b>406,494</b>         | <b>399,178</b> |

### Commission's Analysis

The Commission, in the Tariff Order dated 10<sup>th</sup> April, 2013, had approved the revised number of consumers for FY 2011-12 and FY 2012-13 at 385,544 Nos. and 406,494 Nos. respectively.

However, the Commission approves the number of consumers for FY 2011-12 and for FY 2012-13 in the final True up as submitted by the Petitioner (Actuals), as given in the Table below:

**Table 5.2: Number of consumers Approved in final True up for FY 2011-12 and FY 2012-13**

| Sl. No | Consumer Categories             | FY 2011-12                          |                            | FY 2012-13                          |                            |
|--------|---------------------------------|-------------------------------------|----------------------------|-------------------------------------|----------------------------|
|        |                                 | Actuals Submitted by the Petitioner | Approved by the Commission | Actuals Submitted by the Petitioner | Approved by the Commission |
| 1      | Domestic & Cottage              | 281,903                             | 281,903                    | 293,742                             | 293,742                    |
| 2      | Commercial                      | 41,943                              | 41,943                     | 43,479                              | 43,479                     |
| 3      | Agriculture                     | 6,828                               | 6,828                      | 6,859                               | 6,859                      |
| 4      | Public lighting                 | 48,384                              | 48,384                     | 48,485                              | 48,485                     |
| 5      | LT Industrial                   | 6,035                               | 6,035                      | 6,142                               | 6,142                      |
| 6      | Temporary supply - LT&HT        | -                                   | -                          | -                                   | -                          |
|        | <b>Total LT</b>                 | <b>385,093</b>                      | <b>385,093</b>             | <b>398,707</b>                      | <b>398,707</b>             |
| 7      | HT 1 Industrial                 | 308                                 | 308                        | 361                                 | 361                        |
| 8      | HT Commercial                   | 93                                  | 93                         | 58                                  | 58                         |
| 9      | HT 2 - Government & water tanks | 43                                  | 43                         | 45                                  | 45                         |
| 10     | HT 3 – EHT                      | 7                                   | 7                          | 7                                   | 7                          |
|        | <b>Total HT</b>                 | <b>451</b>                          | <b>451</b>                 | <b>471</b>                          | <b>471</b>                 |
|        | <b>Total LT and HT</b>          | <b>385,544</b>                      | <b>385,544</b>             | <b>399,178</b>                      | <b>399,178</b>             |

## 5.3 Energy Sales

### Petitioner's Submission

The Petitioner has submitted the category-wise energy sales for FY 2011-12 and FY 2012-13. The details are given in the Table below:

**Table 5.3: Category-wise Energy Sales for FY 2011-12 and FY 2012-13 submitted by the Petitioner (MU)**

| S. No | Consumer Categories             | FY 2011-12             |              | FY 2012-13             |              |
|-------|---------------------------------|------------------------|--------------|------------------------|--------------|
|       |                                 | Approved by Commission | Actuals      | Approved by Commission | Actuals      |
| 1     | Domestic & Cottage              | 544                    | 547          | 519                    | 591          |
| 2     | Commercial                      | 168                    | 168          | 171                    | 182          |
| 3     | Agriculture                     | 57                     | 57           | 57                     | 57           |
| 4     | Public lighting                 | 24                     | 24           | 25                     | 28           |
| 5     | LT Industrial                   | 184                    | 184          | 197                    | 197          |
| 6     | Temporary supply - LT&HT        | 14                     | 14           | 11                     | 20           |
|       | <b>Total LT</b>                 | <b>990</b>             | <b>994</b>   | <b>980</b>             | <b>1,076</b> |
| 7     | HT 1 Industrial                 | 975                    | 352          | 978                    | 958          |
| 8     | HT Commercial                   |                        | 623          |                        | 57           |
| 9     | HT 2 - Government & water tanks | 45                     | 45           | 53                     | 45           |
| 10    | HT 3 – EHT                      | 308                    | 308          | 337                    | 339          |
|       | <b>Total HT</b>                 | <b>1,328</b>           | <b>1,327</b> | <b>1,369</b>           | <b>1,399</b> |
|       | <b>Total LT and HT</b>          | <b>2,318</b>           | <b>2,321</b> | <b>2,348</b>           | <b>2,475</b> |

#### Commission's Analysis

The Commission, in the Tariff Order dated 10<sup>th</sup> April, 2013, had approved the revised energy sales for FY 2011-12 and FY 2012-13 at 2318 MU and 2348 MU respectively. The actual energy sales are marginally higher by 3 MU for FY 2011-12 and about 127 MU during FY 2012-13.

The Commission approves the energy sales at 2321 MU for FY 2011-12 and 2475 MU for FY 2012-13 in the final True up, as given in the Table below:

**Table 5.4: Energy Sales Approved in True up for FY 2011-12 and FY 2012-13 (MU)**

| S. No | Consumer Categories      | FY 2011-12                          |                            | FY 2012-13                          |                            |
|-------|--------------------------|-------------------------------------|----------------------------|-------------------------------------|----------------------------|
|       |                          | Actuals Submitted by the Petitioner | Approved by the Commission | Actuals Submitted by the Petitioner | Approved by the Commission |
| 1     | Domestic & Cottage       | 547                                 | 547                        | 591                                 | 591                        |
| 2     | Commercial               | 168                                 | 168                        | 182                                 | 182                        |
| 3     | Agriculture              | 57                                  | 57                         | 57                                  | 57                         |
| 4     | Public lighting          | 24                                  | 24                         | 28                                  | 28                         |
| 5     | LT Industrial            | 184                                 | 184                        | 197                                 | 197                        |
| 6     | Temporary supply - LT&HT | 14                                  | 14                         | 20                                  | 20                         |
|       | <b>Total LT</b>          | <b>994</b>                          | <b>994</b>                 | <b>1,076</b>                        | <b>1,076</b>               |
| 7     | HT 1 Industrial          | 352                                 | 352                        | 958                                 | 958                        |

| S. No | Consumer Categories             | FY 2011-12                          |                            | FY 2012-13                          |                            |
|-------|---------------------------------|-------------------------------------|----------------------------|-------------------------------------|----------------------------|
|       |                                 | Actuals Submitted by the Petitioner | Approved by the Commission | Actuals Submitted by the Petitioner | Approved by the Commission |
| 8     | HT Commercial                   | 623                                 | 623                        | 57                                  | 57                         |
| 9     | HT 2 - Government & water tanks | 45                                  | 45                         | 45                                  | 45                         |
| 10    | HT 3 – EHT                      | 308                                 | 308                        | 339                                 | 339                        |
|       | <b>Total HT</b>                 | <b>1,327</b>                        | <b>1,327</b>               | <b>1,399</b>                        | <b>1,399</b>               |
|       | <b>Total LT and HT</b>          | <b>2,321</b>                        | <b>2,321</b>               | <b>2,475</b>                        | <b>2,475</b>               |

#### 5.4 Intra State Transmission & Distribution Losses

##### Petitioner's Submission

The Petitioner has submitted that the actual T&D losses were 13.17% and 13.23% for FY 2011-12 and FY 2012-13 respectively, as compared to 13.00% and 12.50% respectively approved by the Commission.

##### Commission's Analysis

The Commission observes that the Petitioner has not been able to perform within the T&D losses level set by the Commission for FY 2011-12 and FY 2012-13 in the Tariff Order dated 10<sup>th</sup> April, 2013.

Regulation 9 of JERC (Terms and conditions of Determination of Tariff) Regulation, 2009, deals with Excess or Under Recovery with respect to Norms and Targets.

Regulation 9 (2) of the said JERC Regulation provides as follows:

“The generating company or the licensee, as the case may be, shall bear the entire loss on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission from time to time.”

Therefore, the Commission considers the loss level of 13.00% for FY 2011-12 and 12.5% for FY 2012-13.

The Commission approves the loss level of 13.00% for FY 2011-12 and 12.5% for FY 2012-13.

Table 5.5: Energy Losses Approved by the Commission for FY 2011-12 and FY 2012-13

| Particulars | FY 2011-12  |                         | FY 2012-13  |                         |
|-------------|---|-------------------------|---|-------------------------|
|             | Approved in T.O. dated 10 <sup>th</sup> April, 2013 | Approved in the True up | Approved in T.O. dated 10 <sup>th</sup> April, 2013 | Approved in the True up |
| T&D Losses  | 13.00%  | 13.00%                  | 12.50%  | 12.50%                  |

## 5.5 Energy Balance

### Petitioner's Submission

The Petitioner has revised the energy balance figures based on revised sales, T&D losses and availability at the periphery. The Petitioner has submitted that common pool/UI sales have been 516.47 MU for FY 2011-12 and 347.06 MU for FY 2012-13, as against the approved figures of 516.47 MU for FY 2011-12 and 145.87 MU for FY 2012-13 respectively in the Tariff Order dated 10<sup>th</sup> April, 2013.

The details submitted by the Petitioner are as given in the table below.

Table 5.6: Energy Balance and Distribution Losses submitted by the Petitioner for FY 2011-12 and FY 2012-13 in final True up

| Particulars                                | Previous Year (Approved) |                | Previous Year (Audited) |                |
|--|--------------------------|----------------|-------------------------|----------------|
|  | FY 2011-12               | FY 2012-13     | FY 2011-12              | FY 2012-13     |
| <b>(A) Energy Requirement</b>              |                          |                |                         |                |
| Energy Sales in the UT (MU)                | 2317.48                  | 2348.49        | 2321.29                 | 2474.98        |
| Distribution Losses (%)                    | 13.00%                   | 12.50%         | 13.17%                  | 13.23%         |
| Energy required at the territory (MU)      | 2663.77                  | 2683.99        | 2673.26                 | 2852.30        |
| Add: Sales to common pool consumer/UI (MU) | 516.47                   | 145.87         | 516.47                  | 347.06         |
| Energy requirement at periphery (MU)       | 3180.25                  | 2829.86        | 3189.74                 | 3199.36        |
| <b>(B) Energy Availability (MU)</b>        |                          |                |                         |                |
| Gross Power Purchase                       | 3329.15                  | 2944.74        | 3339.08                 | 3320.82        |
| External Losses (MU)                       | 148.90                   | 114.88         | 149.35                  | 121.46         |
| <b>Net Energy Availability</b>             | <b>3180.25</b>           | <b>2829.86</b> | <b>3189.74</b>          | <b>3199.36</b> |

### Commission's Analysis

The Commission has noted the sales of 2321 MU and 3184 MU for FY 2011-12 and FY 2012-13 respectively, resulting in energy requirements of 3184 MU for FY 2011-12 and 3176 MU for FY 2012-13 with outside sales of 516 MU and 347 MU for FY 2011-12 and FY 2012-13 respectively. To meet the above energy requirement, the gross

energy purchase approved by the Commission is 3333 MU for FY 2011-12 and 3296 MU for FY 2012-13. External losses have been approved as 149 MU and 120 MU for FY 2011-12 and FY 2012-13 respectively, as given in Table below:

**Table 5.7: Energy Balance Approved by the Commission in final True up for FY 2011-12 and FY 2012-13**

| Particulars                                | FY 2011-12                              |   |                               | FY 2012-13                              |   |                               |
|--|---|---|-------------------------------|---|---|-------------------------------|
|  | Approved in T.O. dated 10th April, 2013 | Actuals submitted by the Petitioner (audited) | Now approved in final True up | Approved in T.O. dated 10th April, 2013 | Actuals submitted by the Petitioner (audited) | Now approved in final True up |
| <b>(A) Energy Requirement</b>              |   |   |                               |   |   |                               |
| Energy Sales in the UT (MU)                | 2318                                    | 2321  | 2321                          | 2348                                    | 2475  | 2475                          |
| Distribution Losses (%)                    | 13.00%                                  | 13.17%  | 13.00%                        | 12.50%                                  | 13.23%  | 12.50%                        |
| Distribution Losses (MU)                   | 346                                     | 352   | 347                           | 336                                     | 377   | 354                           |
| Energy required at the territory (MU)      | 2664                                    | 2673  | 2668                          | 2684                                    | 2852  | 2829                          |
| Add: Sales to common pool consumer/UI (MU) | 516                                     | 516   | 516                           | 146                                     | 347   | 347                           |
| Energy requirement at periphery (MU)       | 3180                                    | 3190  | 3185                          | 2830                                    | 3199  | 3176                          |
| <b>(B) Energy Availability (MU)</b>        |   |   |                               |   |   |                               |
| Gross Power Purchase/Requirement           | 3329                                    | 3339  | 3333                          | 2945                                    | 3321  | 3296                          |
| External Losses (MU)                       | 149                                     | 149   | 149                           | 115                                     | 121.5   | 120                           |
| External Losses (%)                        |   | 4.47%   | 4.47%                         | 3.90%                                   | 3.66%   | 3.64%                         |
| <b>Net Energy Availability</b>             | <b>3180</b>                             | <b>3190</b>                                   | <b>3184</b>                   | <b>2830</b>                             | <b>3199</b>                                   | <b>3176</b>                   |

## 5.6 Power Purchase Quantum and Cost for FY 2011-12 and FY 2012-13

The Petitioner has submitted as under:

“PED meets its total energy requirements from its allocation from the Central Generating Stations (CGS) and State utilities like TANGEDCO, KSEB and PPCL. PPCL is within the UT, generating company that caters to Karaikal region of PED to the extent of 33 MW. KSEB supplies power to the Mahe region under the UT of Puducherry.”

### FY 2011-12

#### **Petitioner's Submission**

For FY 2011-12, PED resubmits that the major factor contributing to increase in the power purchase cost was the additional amount of Rs. 117.80 Cr. to TNEB in lieu of the increase in tariff to Rs. 3.10/kWh for the years 2009-10, 2010-11 and 2011-12, pursuant to the Interim Order of the Hon'ble Madras High Court. During the year 2012-13, the Hon'ble High Court of Madras (in an Interim Order) directed PED to pay the differential cost as per the revised CERC Tariff Order pertaining to NLC TS-I for the period from April 2009 to August 2012. Based on the payment details, a provision for Rs. 117.82 Cr. (relating to power purchased during 2009-10, 2010-11 and 2011-12) has been made in the books of accounts and the amount has been included in the Power Purchase Cost for the year.

Apart from the above cost, an additional amount of Rs. 89.30 Cr. has been included in the Power Purchase amount on account of revision of invoices, debit and credit notes received from Power Suppliers (i.e., Power Generating, Transmission & Wheeling companies) in the financial year 2011-12. These include: charges / credit pertaining to power purchased by the PED in 2011-12 as well as in prior financial years. These invoices were raised in the year 2011-12 because of the orders passed by the respective Regulatory Commissions governing the respective power suppliers or due to the refunds/liabilities arising to the power suppliers on account of tax assessments, etc., which have to be recovered from (or credited to) the PED.

The table below shows the summary of power purchased from various sources, along with their costs for FY 2011-12, including transmission charges, UI charges and purchase from traders.

**Table 5.8: Power Purchase Quantum & Cost for FY 2011-12**

| Sl. No | Particulars | Approved (FY 2011-12) as per T.O. dated 10 <sup>th</sup> April, 2013 |               |                | Actuals (FY 2011-12) as per audited accounts |               |                |
|--------|-------------|--|---------------|----------------|--|---------------|----------------|
|        |             | Purchase (MUs)   | Cost (Rs. Cr) | Rate (Rs/Unit) | Purchase (MUs)                               | Cost (Rs. Cr) | Rate (Rs/Unit) |
| 1      | NTPC        | 1,589.10   | 399.80        | 2.52           | 1,599.03                                     | 402.50        | 2.52           |
| 2      | NLC         | 829.00   | 208.10        | 2.51           | 829.04                                       | 208.07        | 2.51           |
| 3      | NPCIL       | 238.80   | 68.90         | 2.89           | 238.79                                       | 68.87         | 2.88           |
| 4      | KSEB        | 36.40  | 14.00         | 3.85           | 36.39  | 13.95         | 3.83           |
| 5      | TANGEDCO    | 400.10   | 73.50         | 1.84           | 400.11                                       | 73.53         | 1.84           |
| 6      | PPCL        | 235.70   | 73.70         | 3.13           | 235.73                                       | 73.74         | 3.13           |

| Sl. No | Particulars          | Approved (FY 2011-12) as per T.O. dated 10 <sup>th</sup> April, 2013 |                 |                | Actuals (FY 2011-12) as per audited accounts |                 |                |
|--------|----------------------|--|-----------------|----------------|--|-----------------|----------------|
|        |                      | Purchase (MUs)   | Cost (Rs. Cr)   | Rate (Rs/Unit) | Purchase (MUs)                               | Cost (Rs. Cr)   | Rate (Rs/Unit) |
| 7      | Transmission Charges |  | 65.90           |                |  | 65.99           |                |
| 8      | Other adjustments *  |  | 191.10          |                |  | 191.09          |                |
|        | <b>Total</b>         | <b>3,329.10</b>  | <b>1,095.00</b> | <b>3.29</b>    | <b>3,339.08</b>                              | <b>1,097.74</b> | <b>3.29</b>    |

\* Other adjustments includes rebate and additional payments due to TNEB.

### Commission's Analysis

The Commission has considered the power purchase corresponding to the energy requirement approved for FY 2011-12 in the Tariff Order dated 10<sup>th</sup> April, 2013. There is a marginal increase of about 6 MU in power purchase from what was approved in the Tariff Order dated 10<sup>th</sup> April, 2013. Even the power purchase cost submitted in the final True up is Rs. 1097.74 Cr, as against the amount approved in the Tariff Order dated 10<sup>th</sup> April, 2013. As mentioned earlier, the quantum of power purchase is about 6 MU higher than the quantum approved in the Tariff Order dated 10<sup>th</sup> April, 2013. However the Commission has considered the power purchase quantum for FY 2011-12 at 3333 MU as shown the Table 5.7. The Commission has deducted additional power purchase of 6 MU (3339 MU-3333 MU) from the Power Purchase from the Simhadri Stage II costing about Rs.1.29 Cr. for not achieving the targeted T&D Loss. The high cost of Rs. 1.29 Cr represents the higher quantum of 6 MU purchased.

The Commission, therefore, approves the quantum of power purchase of **3333 MU** at a total cost of Rs. **1096.45 Cr.** in the Final True up for FY 2011-12.

**Table 5.9: Approved Power Purchase quantum for FY 2011-12 in final Truing up**

| Sl. No | Particulars          | Approved by the Commission in the Final true up FY 2011-12 |                 |
|--------|----------------------|--|-----------------|
|        |                      | Purchase (MUs)   | Cost (Rs. Cr)   |
| 1      | NTPC                 | 1,599.03   | 402.50          |
| 2      | NLC                  | 829.04   | 208.07          |
| 3      | NPCIL                | 238.79   | 68.87           |
| 4      | KSEB                 | 36.39  | 13.95           |
| 5      | TANGEDCO             | 400.11   | 73.53           |
| 6      | PPCL                 | 235.73   | 73.74           |
| 7      | Transmission Charges |  | 65.99           |
| 8      | Other adjustments *  |  | 191.09          |
|        | <b>Total</b>         | <b>3,339.08</b>  | <b>1,097.74</b> |

| Sl. No | Particulars                          | Approved by the Commission in the Final true up FY 2011-12 |                |
|--------|--------------------------------------|--|----------------|
|        |                                      | Purchase (MUs)   | Cost (Rs. Cr)  |
| 9      | Less : Disallowed power Purchase     | 6.00   | 1.29           |
| 10     | <b>Total Power Purchase approved</b> | <b>3333.08</b>   | <b>1096.45</b> |

\* Other adjustments includes rebate and additional payments due to TNEB

### **FY 2012-13**

#### **Petitioner's Submission**

The Petitioner has submitted the Power purchase quantum and cost approved under review for FY 2012-13 in the Tariff Order dated 10<sup>th</sup> April, 2013 and the actual for FY 2012-13, based on the Audited Annual Accounts, as given below:

**Table 5.10: Power Purchase Quantum and Cost for FY 2012-13**

| S. No | Particulars               | FY 2012-13<br>Approved as per T.O. dated<br>10 <sup>th</sup> April, 2013 |               |                | FY 2012-13<br>Actuals as per<br>audited accounts |               |                |
|-------|---------------------------|--|---------------|----------------|--|---------------|----------------|
|       |                           | Purchase (MUs)   | Cost (Rs. Cr) | Rate (Rs/Unit) | Purchase (MUs)                                   | Cost (Rs. Cr) | Rate (Rs/Unit) |
| 1     | NTPC                      | 1,454.29   | 346.51        | 2.38           | 1,579.11   | 402.86        | 2.55           |
| 2     | NLC                       | 495.44   | 156.77        | 3.16           | 820.89   | 223.86        | 2.73           |
| 3     | NPCIL                     | 249.59   | 68.40         | 2.74           | 248.49   | 70.90         | 2.85           |
| 4     | KSEB                      | 36.37  | 15.47         | 4.25           | 35.26  | 21.11         | 5.99           |
| 5     | TANGEDCO including Vallur | 465.15   | 146.47        | 3.15           | 411.08   | 137.56        | 3.35           |
| 6     | PPCL                      | 235.86   | 86.63         | 3.67           | 216.49   | 79.61         | 3.68           |
| 7     | Over- drawl               | 8.03   | 2.89          | 3.59           | 9.51   | 3.41          |                |
| 8     | Transmission Charges      |  | 58.19         |                |  | 60.03         |                |
| 9     | RPO                       |  | 8.74          |                |  | 8.65          |                |
| 10    | Rebate                    |  | 3.16          |                |  | (15.53)       |                |
|       | <b>Total</b>              | <b>2,944.73</b>  | <b>893.23</b> | <b>3.03</b>    | <b>3,320.82</b>                                  | <b>992.47</b> | <b>2.98</b>    |

The Petitioner has further submitted that there is a major increase in the cost per unit for the power procured from KSEB, due to the reason that since Mahe region was (and is) being treated as an HT consumer by KSEB, there was a revision in HT tariff for that particular year, resulting in such a huge hike and hence requested to approve Rs. 992.47 Cr for FY 2012-13 towards power purchase cost which is actual expenditure incurred during the year.



### Commission's Analysis

The quantum of actual power purchase during FY 2012-13 is about 376 MU more than the power purchase approved in the Tariff Order dated 10<sup>th</sup> April, 2013. The Commission has arrived at Gross Power Purchase Quantum required for FY 2012-13 at 3296 MU as shown in the Table 5.7 as against 3321 MU submitted by the Petitioner because the Petitioner could not achieve the targeted T&D Loss of 12.5%. In view of the above the energy purchase has to be reduced to 3296 MU against 3321 MU. The Commission approves the purchase of 3296 MU for FY 2012-13. Accordingly, the Commission considers the cost of disallowed power of 25 MU (3321-3296) at Rs. 15.48 Cr considering the average power purchase cost of Simhadri stage II.

**Table 5.11: Approved Power Purchase Quantum and cost for FY 2012-13 in final true up**

| Sl. No | Particulars                    | Approved for FY 2012-13<br>in final true up |               |                |
|--------|--------------------------------|---|---------------|----------------|
|        |                                | Purchase (MUs)                              | Cost (Rs. Cr) | Rate (Rs/Unit) |
| 1      | NTPC                           | 1,579.11                                    | 402.86        | 2.55           |
| 2      | NLC                            | 820.89                                      | 223.86        | 2.73           |
| 3      | NPCIL                          | 248.49                                      | 70.90         | 2.85           |
| 4      | KSEB                           | 35.26                                       | 21.11         | 5.99           |
| 5      | TANGEDCO including Vallur      | 411.08                                      | 137.56        | 3.35           |
| 6      | PPCL                           | 216.49                                      | 79.61         | 3.68           |
| 7      | Over- drawl                    | 9.51  | 3.41          |                |
| 8      | Transmission Charges           |   | 60.03         |                |
| 9      | RPO                            |   | 8.65          |                |
| 10     | Rebate                         |   | (15.53)       |                |
|        | <b>Total</b>                   | <b>3,320.82</b>                             | <b>992.47</b> | <b>2.98</b>    |
| 11     | Less :Disallowed power         | 25  | 15.48         |                |
| 12     | <b>Power Purchase approved</b> | <b>3296</b>                                 | <b>977</b>    |                |

### 5.7 Power Purchase Cost

The power purchase cost for FY 2011-12 (approved in the Tariff Order dated 10<sup>th</sup> April, 2013) was Rs. 1095.00 Cr, whereas the actual power purchase cost is Rs. 1097.74 Cr i.e. a marginal increase of Rs. 2.74 Cr. However the Commission has approved Rs. 1096.45 Cr by limiting the power purchase quantum at 3333 MU.

The power purchase cost approved for FY 2012-13 in the Tariff Order dated 10<sup>th</sup> April, 2013 was Rs. 893.23 Cr, whereas the actual power purchase cost is Rs. 992.47 Cr i.e. an increase of Rs. 99.24 Cr.

There were only minor variations in the quantum of power purchased and the cost between what was approved for FY 2011-12 and FY 2012-13 and the actual cost.

The Commission approves the power purchase and power purchase cost during FY 2011-12 and FY 2012-13, as given in the Table below:

**Table 5.12: Power Purchase Quantum and Cost approved for FY 2011-12 and FY 2012-13 in final true up**

| Particulars                   | FY 2011-12  |   | FY 2012-13  |   |
|-------------------------------|---|---|---|---|
|                               | Approved in TO dated 10 <sup>th</sup> April, 2013 | Approved by the Commission in the final True up | Approved in the TO dated 10 <sup>th</sup> April, 2013 | Approved by the Commission in the final True up |
| Power Purchase Quantum (MU)   | 3329.15   | 3333.08   | 2944.73   | 3295.61   |
| Power Purchase Cost (Rs. Cr.) | 1095.08   | 1096.45   | 893.23  | 976.99  |

## 5.8 Operation and Maintenance Expenses

The Operation and Maintenance Expenses comprising of Employee Expenses, A&G Expenses and R&M Expenses have been discussed in the following sections.

### Petitioner's Submission

The PED has submitted that the PED had computed the Employee Expenses for FY 2011-12 and FY 2012-13, based on the actual Employee Expenses incurred during the earlier years. The PED has furnished the details of Employee Cost in the following Table:

**Table 5.13: Employee Expenses submitted by PED for FY 2011-12 and FY 2012-13**

| Sl. No | Particulars                      | FY 2011-12  |                                 | FY 2012-13  |                                 |
|--------|----------------------------------|---|---------------------------------|---|---------------------------------|
|        |                                  | Approved as per Tariff Order dated 10 <sup>th</sup> April, 2013 | Actuals as per audited accounts | Approved as per Tariff Order dated 10 <sup>th</sup> April, 2013 | Actuals as per audited accounts |
|        | <b>Salaries &amp; Allowances</b> |   |                                 |   |                                 |
| 1      | Salaries                         |   | 66.44                           |   | 73.44                           |
| 2      | Wages                            |   | 0.12                            |   | 0.61                            |

| Sl. No | Particulars                      | FY 2011-12  |                                 | FY 2012-13  |                                 |
|--------|----------------------------------|---|---------------------------------|---|---------------------------------|
|        |                                  | Approved as per Tariff Order dated 10 <sup>th</sup> April, 2013 | Actuals as per audited accounts | Approved as per Tariff Order dated 10 <sup>th</sup> April, 2013 | Actuals as per audited accounts |
| 3      | Stipend                          |   | 0.32                            |   | 0.35                            |
| 4      | Transport Allowance              |   | 0.44                            |   | 0.46                            |
| 5      | Overtime allowance               |   | 0.95                            |   | 0.58                            |
|        | <b>Total</b>                     | -   | <b>68.26</b>                    | -   | <b>75.43</b>                    |
| 6      | Less: Add/Deduct share of others |   | 1.75                            |   | 1.16                            |
|        | <b>Total</b>                     | -   | <b>66.51</b>                    | -   | <b>74.27</b>                    |
| 7      | Less: Amount capitalised         |   | 9.40                            |   | 9.00                            |
| 8      | Net amount                       | -   | <b>57.11</b>                    | -   | <b>65.27</b>                    |
| 9      | Add : prior period expenses      | -   | -                               | -   | -                               |
|        | <b>Total Employee Expenses</b>   | <b>54.15</b>  | <b>57.11</b>                    | <b>58.40</b>  | <b>65.27</b>                    |

The PED has submitted that the Commission had approved the Employee Expenses at Rs. 53.22 Cr for FY 2010-11, against which the actual expenditure during FY 2011-12 is Rs. 57.11 Cr, an increase of about 7.3%. The PED has submitted that the WPI for FY 2011-12 was 8.93% against which the escalation in the cost is 7.3% which is lower than the WPI of the relevant year.

The PED also submitted that there is an increase in “Employee cost” due to long pending Assured Career Progression (ACP), modified ACP and payments of arrears retrospectively in both the years.

#### **Commission’s Analysis**

The Commission in the Tariff Order dated 10<sup>th</sup> April 2013 has approved Rs.58.40 Cr. towards Employee Expenses for FY 2012-13 and as per the audited account the actual employee cost is at Rs. 65.27 Cr.

The Commission has considered the Employee Expenses for FY 2011-12 and FY 2012-13 in line with JERC Tariff Regulations. The Employee Expenses during FY 2011-12 and FY 2012-13 were within the WPI Index of 8.94% over the actuals of FY 2010-11 and FY 2011-12 respectively. The Commission considers the Employee Expenses during FY 2011-12 at Rs. 57.11 Cr. and FY 2012-13 at Rs. 65.27 Cr. including transport allowance paid to the employees and approves, as given in the Table below:

**Table 5.14: Employee Expenses Approved for FY 2011-12 and FY 2012-13**

| Particulars       | FY 2011-12  |                             | FY 2012-13  |                             |
|-------------------|---|-----------------------------|---|-----------------------------|
|                   | Approved in TO dated 10 <sup>th</sup> April, 2013 | Actuals approved in True up | Approved in TO dated 10 <sup>th</sup> April, 2013 | Actuals approved in True up |
| Employee Expenses | 54.15   | 57.11                       | 58.40   | 65.27                       |

## 5.9 Repairs and Maintenance Expenses

### Petitioner's Submission

The Petitioner has submitted that Repair and Maintenance Expenses have been claimed as per expenses actually incurred during FY 2011-12 and FY 2012-13, which are reflected in the annual accounts of respective years, as given below:

**Table 5.15: R&M Expenses for FY 2011-12 and FY 2012-13 Claimed by PED**

(Rs. Cr)

| Particulars  | FY 2011-12  |                                 | FY 2012-13  |                                 |
|--------------|---|---------------------------------|---|---------------------------------|
|              | Approved in TO dated 10 <sup>th</sup> April, 2013 | Actuals as per audited accounts | Approved in TO dated 10 <sup>th</sup> April, 2013 | Actuals as per audited accounts |
| R&M Expenses | 16.17   | 16.18                           | 17.06   | 9.92                            |

PED has further submitted that the actual R&M Expenses during FY 2011-12 are in line with the approved R&M Expenses. The actual R&M Expenses during FY 2012-13 were lower than the approved expenses. The R&M Expenses during FY 2011-12 were higher compared to R&M Expenses during FY 2012-13 due to the Thane Cyclone, resulting in major R&M Expenses.

### Commission's Analysis

The Commission has observed that the actual R&M Expenses during FY 2011-12 were in line with R&M Expenses approved for FY 2011-12 and the actual R&M Expenses during FY 2012-13 were lower than the approved R&M Expenses for FY 2012-13.

The Commission approves the R&M Expenses for True up at Rs. 16.18 Cr for FY 2011-12 and Rs. 9.92 Cr for FY 2012-13, as given in the Table below:

Table 5.16: R&amp;M Expenses Approved for FY 2011-12 and FY 2012-13 (Rs. Cr)

| Particulars  | FY 2011-12   |                         | FY 2012-13   |                         |
|--------------|--|-------------------------|--|-------------------------|
|              | Approved in the TO dated 10 <sup>th</sup> April 2013 | Approved in the True up | Approved in the TO dated 10 <sup>th</sup> April 2013 | Approved in the True up |
| R&M Expenses | 16.17  | 16.18                   | 17.06  | 9.92                    |

## 5.10 A&G Expenses

### Petitioner's Submission

The Petitioner has submitted that the A&G Expenses mainly comprise of rents, professional charges and Office Expenses. The expenses incurred by the Petitioner during FY 2011-12 and FY 2012-13 were Rs. 4.00 Cr. and Rs. 3.45 Cr. respectively, as shown below:

Table 5.17: A&amp;G Expenses for FY 2011-12 and FY 2012-13

(Rs. Cr)

| S. No. | Particulars  | FY 2011-12  |             | FY 2012-13  |             |
|--------|--|-------------|-------------|-------------|-------------|
|        |  | Approved    | Actual      | Approved    | Actual      |
| 1      | Rent, rates & taxes  |             | 0.41        |             | 0.41        |
| 2      | Other Professional charges including Regulatory Expenses (License + Petition Fees) |             | 1.35        |             | 0.91        |
| 3      | Office Expenses including Legal, Professional & Special Service Charges            |             | 1.60        |             | 1.57        |
| 4      | Advertisement & Publicity  |             | 0.06        |             | 0.07        |
| 5      | Other A&G Charges  |             | 0.05        |             | 0.01        |
| 6      | Others   |             | 0.37        |             | 0.39        |
| 7      | Other material related expenses  |             | 0.16        |             | 0.09        |
|        | <b>Total</b>   |             | <b>4.00</b> |             | <b>3.45</b> |
| 8      | Add/Deduct share of others (to be specified)                                       |             | -           |             | -           |
|        | <b>Total expenses</b>  |             | <b>4.00</b> |             | <b>3.45</b> |
| 9      | Less: Capitalised  |             | -           |             | -           |
|        | <b>Net expenses</b>  |             | <b>4.00</b> |             | <b>3.45</b> |
| 10     | Add: Prior period  |             | -           |             | -           |
|        | <b>Total A&amp;G Expenses charged to revenue</b>                                   | <b>4.44</b> | <b>4.00</b> | <b>4.84</b> | <b>3.45</b> |

The PED had further submitted that it had been able to limit its actual A&G expenses to below the laid-down limits for FY 2011-12 and FY 2012-13. The PED has requested the Commission to approve the A&G Expenses for FY 2011-12 and FY 2012-13.

### Commission's Analysis

The Commission observes that the Administration & General Expenses as per Schedule 11 to the audited accounts for FY 2011-12 is at Rs. 4.29 Cr. and for FY 2012-13 is Rs.3.82 Cr. The Commission also observed that "other expenses" in the Profit & Loss account for FY 2011-12 is Rs.0.16 Cr. and for FY 2012-13 is Rs.0.09 Cr. It is submitted by the Petitioner that the transport allowance which is included under A&G expenses in the audited accounts is considered under "Employee cost" as per the Regulatory formats. The "transport allowance" for FY 2011-12 is Rs.0.44 Cr. and for FY 2012-13 is Rs.0.46 Cr.

The following table gives the reconciliation between the A&G expenses as per audited accounts and the same as considered for tariff purposes.

**Table 5.18: A&G Expenses for FY 2011-12 and FY 2012-13**

| (Rs. Cr)   |            |            |
|--|------------|------------|
| Particulars  | FY 2011-12 | FY 2012-13 |
| A&G Expenses as per audited accounts (Schedule 11)   | 4.29       | 3.82       |
| Add: Other expenses  | 0.15       | 0.09       |
|  | 4.44       | 3.91       |
| Less: Transport allowance included in A&G expenses under audited accounts but treated as "Employee cost" for tariff purposes | -0.44      | -0.46      |
| A&G expenses considered for tariff purpose   | 4.00       | 3.45       |

The Commission approves the A&G Expenses at Rs. 4.00 Cr. for FY 2011-12 and Rs.3.45 Cr. for FY 2012-13, as given in Table below:

**Table 5.19: A&G Expenses Approved for FY 2011-12 and FY 2012-13**

| Particulars  | FY 2011-12   |                         | FY 2012-13   |                         |
|--------------|--|-------------------------|--|-------------------------|
|              | Approved in the TO dated 10 <sup>th</sup> April 2013 | Approved in the True up | Approved in the TO dated 10 <sup>th</sup> April 2013 | Approved in the True up |
| A&G Expenses | 4.44   | 4.00                    | 4.84   | 3.45                    |

### Total O&M Expenses

Based on the discussions in the foregoing paragraphs, the O&M Expenses for the year FY 2011-12 and FY 2012-13 are summarised below:

Table 5.20: O&amp;M Expenses for FY 2011-12 and FY2012-13

(Rs. Cr)

| S. No. | Particulars                   | FY 2011-12                                       |  |                         | FY 2012-13                                       |  |                         |
|--------|-------------------------------|--|--|-------------------------|--|--|-------------------------|
|        |                               | Approved in TO dated 10 <sup>th</sup> April 2013 | Petitioner's submission (Audited Accounts) | Approved in the true up | Approved in TO dated 10 <sup>th</sup> April 2013 | Petitioner's submission (Audited Accounts) | Approved in the true up |
| 1      | Employee Expenses             | 54.15  | 57.11                                      | 57.11                   | 58.40  | 65.27                                      | 65.27                   |
| 2      | R&M Expenses                  | 16.17  | 16.18                                      | 16.18                   | 17.06  | 9.92                                       | 9.92                    |
| 3      | A&G Expenses                  | 4.44   | 4.00                                       | 4.00                    | 4.84   | 3.45                                       | 3.45                    |
|        | <b>Total O&amp;M Expenses</b> | <b>74.76</b>                                     | <b>77.28</b>                               | <b>77.28</b>            | <b>80.30</b>                                     | <b>78.64</b>                               | <b>78.64</b>            |

**5.11 Gross Fixed Assets****Petitioner's Submission**

The Petitioner has submitted that the Opening balance of GFA comes to Rs. 458.34 Cr for FY 2011-12 and Rs. 480.48 Cr for FY 2012-13 as per Annual Accounts of the respective year. The opening balance, additions and closing balance of GFA for FY 2011-12 and FY 2012-13 are as given below:

Table 5.21: GFA for FY 2011-12 and FY 2012-13 submitted by the Petitioner

(Rs. Cr)

| Particulars                                       | FY 2011-12  |  | FY 2012-13  |  |
|---|---|--|---|--|
|   | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner's submission (audited accounts) | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner's submission (audited accounts) |
| Opening value of GFA at the beginning of the year | 458.34  | 458.34                                     | 480.49  | 480.48                                     |
| Additions during the year                         | 22.15   | 26.39                                      | 65.36   | 74.81                                      |
| Value of Assets Sold/Disposal off                 | -   | 4.25                                       | -   | -  |
| Gross fixed Assets at the end of the year         | 480.49  | 480.48                                     | 545.85  | 555.30                                     |

The PED has submitted that Asset and Depreciation registers have been prepared and duly audited and fixed assets, accumulated depreciation and depreciation for the year have been shown in the Audited Accounts for FY 2011-12 and FY 2012-13.

The Petitioner requests the Commission to approve the actual gross fixed assets, openings, additions, etc., during the years FY 2011-12 and FY 2012-13.

**Commission's Analysis:**

The Commission has considered the opening GFA and additions to GFA based on the audited accounts of the Petitioner for FY 2011-12 and FY 2012-13 as detailed in the Table below:

Table 5.22: GFA for FY 2011-12 and FY 2012-13 approved by the Commission

(Rs. Cr)

| Particulars                                       | FY 2011-12  |  |                     | FY 2012-13  |  |                     |
|---|---|--|---------------------|---|--|---------------------|
|   | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) | Approved in true up | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) | Approved in true up |
| Opening value of GFA at the beginning of the year | 458.34  | 458.34                                   | 458.34              | 480.49  | 480.48                                   | 480.48              |
| Additions during the year                         | 22.15   | 26.39                                    | 26.39               | 65.36   | 74.81                                    | 74.81               |
| Value of Assets Sold/Disposal off                 | -   | 4.25                                     | 4.25                | -   | -  | -                   |
| Gross fixed Assets at the end of the year         | 480.49  | 480.48                                   | 480.48              | 545.85  | 555.30                                   | 555.30              |

## 5.12 Depreciation

### Petitioner's Submission

As per Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, depreciation for the assets shall be calculated annually at the rates specified by the CERC from time to time. The same have been applied on different categories of assets.

It is further submitted that the depreciation arrived at in the annual accounts for FY 2011-12 and FY 2012-13 has been based on the rates specified by the Commission in its Regulations, and is charged on pro-rata basis.

The depreciation arrived at for FY 2011-12 and FY 2012-13 is based on the approved rates specified by the Commission for different asset class. The same has been reflected in the Annual Accounts.

Table 5.23: Depreciation for FY 2011-12 and FY 2012-13 submitted by the Petitioner

| Sl. No. | Particulars          | Rate of Depreciation |
|---------|----------------------|----------------------|
| 1       | Land and Land Rights | - -                  |
| 2       | Buildings            | 3.34%                |
| 3       | Plant and Machinery  | 5.28%                |
| 4       | Lines and Cables     | 5.28%                |
| 5       | Office Equipment     | 6.33%                |
| 6       | IT Equipment         | 15.00%               |



|    |                                 |       |
|----|---------------------------------|-------|
| 7  | Vehicles                        | 9.50% |
| 8  | Furniture and Fixtures          | 6.33% |
| 9  | Testing and measuring equipment | 5.28% |
| 10 | SCADA centre                    | 5.28% |

### **Commission's Analysis**

In line with the treatment of the GFA and Capitalisation, the Commission, considering the reasonableness, approves the capitalisation of assets during FY 2011-12 and FY 2012-13, as submitted by the Petitioner.

The Commission approves the Gross Fixed Assets and depreciation for FY 2011-12 and FY 2012-13, as given below:

**Table 5.24: Depreciation Approved for FY 2011-12 and FY 2012-13**

**(Rs. Cr)**

| Particulars  | FY 2011-12  |  |                                | FY 2012-13  |  |                                |
|--|---|--|--------------------------------|---|--|--------------------------------|
|  | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (Audited accounts) | Actual as per audited accounts | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (Audited accounts) | Actual as per audited accounts |
| Opening Value of Assets at the Beginning of the year | 458.34  | 458.34                                   | 458.34                         | 480.49  | 480.48                                   | 480.48                         |
| Additions During the year                            | 22.15   | 26.39                                    | 26.39                          | 65.36   | 74.81                                    | 74.81                          |
| Value of Assets sold/ disposed off                   | -   | 4.25                                     | 4.25                           | -   | -  | -                              |
| Gross Fixed Assets at the end of the year            | 480.49  | 480.48                                   | 480.48                         | 545.85  | 555.30                                   | 555.30                         |
| Depreciation for the year                            | 20.28   | 17.87                                    | 17.87                          | 23.39   | 21.96                                    | 21.96                          |
| <b>Average Depreciation Rate</b>                     | <b>4.32%</b>                                      | <b>3.81%</b>                             | <b>3.81%</b>                   | <b>4.56%</b>                                      | <b>4.24%</b>                             | <b>4.24%</b>                   |

The Commission approves the depreciation of Rs. 17.87 Cr. for FY 2011-12 and Rs. 21.96 Cr. for FY 2012-13.

### **5.13 Interest and Finance Charges**

#### **Petitioner's Submission**

The Petitioner has submitted that:

Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 provides for Interest and Finance Charges on Loan. PED has submitted that the majority of capital assets are created out of the equity contribution from the Government of Puducherry and the actual borrowing of loan is only to the extent of the R-APDRP schemes. However, PED has claimed the interest

charges based on normative loan calculation. The Interest and Finance Charges have been arrived at based on the normative loan considered to the extent of capitalisation during the year. The Table below shows the Interest and Finance Charges vis-a-vis those approved by the Commission for FY2011-12 and FY2012-13 respectively.

**Table 5.25: Interest and Finance Charges for FY 2011-12 and FY 2012-13**

| Particulars                                 | (Rs. Cr)  |  |   |  |
|---|---|--|---|--|
|   | FY 2011-12  |  | FY 2012-13  |  |
|   | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) |
| Opening Normative Loan                      | 36.17   | 36.17                                    | 47.92   | 51.03                                    |
| Add: Normative Loan during the Year         | 15.50   | 18.48                                    | 45.75   | 52.37                                    |
| Less: Normative Repayment                   | 3.75  | 3.62                                     | 5.3   | 5.10                                     |
| <b>Closing Normative Loan</b>               | <b>47.92</b>                                      | <b>51.03</b>                             | <b>88.37</b>                                      | <b>98.30</b>                             |
| Average Normative Loan                      | <b>42.05</b>                                      | <b>43.60</b>                             | <b>68.15</b>                                      | <b>74.66</b>                             |
| Rate of Interest(@SBA Rate)                 | 13.00%  | 13.00%                                   | 14.75%  | 14.75%                                   |
| <b>Interest on Normative Loan</b>           | <b>5.47</b>                                       | <b>5.67</b>                              | <b>10.05</b>                                      | <b>11.01</b>                             |
| Other Finance Charges                       | 2.40  | 1.32                                     | 1.32  | 2.09                                     |
| <b>Total Interest &amp; Finance Charges</b> | <b>7.87</b>                                       | <b>6.99</b>                              | <b>11.37</b>                                      | <b>13.10</b>                             |

Along with the normative interest calculated and claimed in the Table highlighted above, it is submitted that certain financial charges are also incurred by the department. These are related to bank charges, finance charges, etc., which are claimed along with the interest in above Table.

The Commission is requested to approve the Interest & Finance Charges at Rs. 6.99 Cr for FY 2011-12 and Rs.13.10 Cr for FY 2012-13, as shown in the Table above.

### **Commission's Analysis**

The Commission has considered that the normative loan based on the additional investment which is funded through normative debt to the tune of 70% and the interest considered by PED and the interest rates being the prevailing SBI Advance Rate as on 1<sup>st</sup> of April of relevant year adopted for FY 2011-12 and FY 2012-13 in the final True up are as given in the Table above.

The Commission considers that the interest claimed on the normative loan at Rs. 6.99 Cr for FY 2011-12 and Rs. 13.10 Cr for FY 2012-13 including “other finance charges” is reasonable and approves the same for final True up for FY 2011-12 and FY 2012-13, as given in the Table below:

**Table 5.26: Interest and Finance Charges Approved for FY 2011-12 and FY 2012-13**

| Particulars                  | FY 2011-12  |  |                                | FY 2012-13  |  |                                |
|------------------------------|---|--|--------------------------------|---|--|--------------------------------|
|                              | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) | Actual as per audited accounts | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) | Actual as per audited accounts |
| Interest and Finance Charges | 7.87  | 6.99                                     | 6.99                           | 11.37   | 13.10                                    | 13.10                          |

(Rs. Cr)

#### **5.14 Interest on Working Capital**

##### **Petitioner’s Submission**

The Petitioner has submitted that the interest on working capital has been arrived at as per Regulation 29 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The rate of interest has been considered at 13.00% for FY 2011-12 and 14.75% for FY 2012-13 (SBI Advance Rate). The interest on working capital claimed is Rs. 4.38 Cr for FY 2011-12 and Rs. 2.39 Cr for FY 2012-13 excluding the total consumer security deposit amount available with the PED.

##### **Commission’s Analysis**

The Petitioner has considered the calculation of the different components of the interest on working capital as per JERC Tariff Regulations. The Commission has considered that the amount collected from the consumers as security deposit is available with the Petitioner and has been treated as part of the available working capital. Various components were discussed in the previous sections and considered to work out the working capital and the ruling SBI Advance Rate of 13.00% for FY 2011-12 and 14.75% for FY 2012-13 as on 1<sup>st</sup> April, 2011 has been considered to calculate the interest on working capital.

The interest on working capital calculated for FY 2011-12 and FY 2012-13 is given in the Table below:

Table 5.27: Approved interest on Working Capital for FY 2011-12 and FY 2012-13

| Particulars                                | (Rs. Cr)  |                     |   |                     |
|--|---|---------------------|---|---------------------|
|  | FY 2011-12  |                     | FY 2012-13  |                     |
|  | Approved in T.O dated 10 <sup>th</sup> April 2013 | Approved in true up | Approved in T.O dated 10 <sup>th</sup> April 2013 | Approved in true up |
| Power Purchase Cost- 1Month                | 77.28   | 91.37               | 70.28   | 81.42               |
| Employee Cost- 1Month                      | 4.51  | 4.76                | 4.87  | 5.44                |
| Administration & General Expenses - 1Month | 0.37  | 0.33                | 0.40  | 0.29                |
| R&M Cost- 1Month                           | 1.35  | 1.35                | 1.42  | 0.83                |
| Less: Security Deposit Opening Bal.        | 115.08  | 64.25               | 133.32  | 73.03               |
| <b>Total</b>                               | <b>(31.57)</b>                                    | <b>33.56</b>        | <b>(56.35)</b>                                    | <b>14.94</b>        |
| <b>Interest Rate</b>                       | 13.00%  | 13.00%              | 14.75%  | 14.75%              |
| <b>Interest on Working Capital</b>         | -   | 4.36                | -   | 2.20                |

The Commission approves the interest on working capital of Rs. 4.36 Cr. and Rs. 2.20 Cr. for FY 2011-12 and FY 2012-13 respectively.

### 5.15 Interest on Security Deposit

#### Petitioner's Submission

The Petitioner has submitted that Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, provides for interest on security deposit, if any, made by the consumer with the licensee. The provision of interest on security deposit is to be made at the Bank rate. The prevailing Bank Rate has been considered at 6% for FY 2011-12 and 9.50% for FY 2012-13, as notified by Reserve Bank of India. Interest arrived at in the True up for FY 2011-12 and FY 2012-13 is given in the Table below:

Table 5.28: Interest on Security Deposit for FY 2011-12 and FY 2012-13

| S. No. | Particulars                      | (Rs. Cr)  |  |   |  |
|--------|----------------------------------|---|--|---|--|
|        |                                  | FY 2011-12  |  | FY 2012-13  |  |
|        |                                  | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) |
| 1      | Opening Security Deposit         | 64.20   | 64.25                                    | 133.32  | 73.03                                    |
| 2      | Add: Deposits during the Year    | 8.82  | 8.78                                     |   | 22.87                                    |
| 3      | Less: Deposits refunded          |   | -  |   | -  |
| 4      | Less: Deposits in form of BG/FDR |   | -  |   | -  |
| 5      | <b>Closing Security Deposit</b>  | <b>73.02</b>                                      | <b>73.03</b>                             | <b>133.32</b>                                     | <b>95.90</b>                             |
| 6      | Average Security Deposit         | 68.61   | 68.64                                    | 133.32  | 84.46                                    |

| S. No. | Particulars                         | FY 2011-12  |  | FY 2012-13  |  |
|--------|-------------------------------------|---|--|---|--|
|        |                                     | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (audited accounts) |
| 7      | <b>Bank Rate</b>                    | 6.00%   | 6.00%                                    | 9.50%   | 9.50%                                    |
| 8      | <b>Interest on Security Deposit</b> | <b>3.61</b>                                       | <b>4.12</b>                              | <b>12.67</b>                                      | <b>8.02</b>                              |

### Commission's Analysis

The Commission observes that no interest on security deposit is paid during FY 2011-12 and FY 2012-13, Accordingly, no interest is considered.

## 5.16 Return on Capital Base/Net Fixed Assets

### Petitioner's Submission

The Petitioner has submitted that the provisions of Regulation 23(2) and Regulation 24 of JERC Tariff Regulations, 2009, provide for entitlement of return on capital base/Net fixed assets by utility/licensee. Thus in line with the Regulation and methodology adopted by the Commission in the previous Tariff Order, PED has calculated the return on capital base at 3%. The return on capital base, as claimed by the PED, is given in the Table below:

**Table 5.29: Return on Capital Base for FY 2011-12 and FY 2012-13 submitted by the Petitioner**

| S. No. | Particulars                               | FY 2011-12  |  | FY 2012-13  |  |
|--------|---|---|--|---|--|
|        |   | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner's submission (audited accounts) | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner's submission (audited accounts) |
| 1      | Gross Block at the beginning of the year  | 458.34  | 458.34                                     | 480.48  | 480.48                                     |
| 2      | Opening CWIP                              | 77.31   | 77.31                                      | 94.69   | 94.69                                      |
| 3      | Less: Opening Debts                       | 13.16   | 13.16                                      | 11.51   | 16.01                                      |
| 4      | Less: Accumulated Depreciation            | 211.42  | 211.42                                     | 231.7   | 229.29                                     |
| 5      | Net Fixed Assets                          | 311.07  | 311.07                                     | 331.96  | 329.88                                     |
| 6      | Less accumulated consumer contribution    | 0.00  | 3.22                                       | 0.00  | 5.35                                       |
| 7      | Net fixed assets at beginning of the year | <b>311.07</b>                                     | <b>314.29</b>                              | <b>331.96</b>                                     | <b>335.23</b>                              |
| 8      | <b>Reasonable Return @ 3% of NFA</b>      | <b>9.33</b>                                       | <b>9.43</b>                                | <b>9.96</b>                                       | <b>10.06</b>                               |

### Commission's Analysis

The Commission observes that in the computation of the Return on Capital Base as per the earlier Tariff Orders, the Commission has inadvertently included the opening CWIP and opening Debts figures. The Commission hereby corrects the computation of the same.

**Table 5.30: Return on Capital Base approved by the Commission (Rs. Cr)**

| Sl, No. | Particulars                                   | FY 2011-12                            |                                 |                     | FY 2012-13                            |                                 |                     |
|---------|---|---------------------------------------|---------------------------------|---------------------|---------------------------------------|---------------------------------|---------------------|
|         |   | Approved in T.O dated 10th April 2013 | Actuals as per audited accounts | Approved in true up | Approved in T.O dated 10th April 2013 | Actuals as per audited accounts | Approved in true up |
| 1       | Gross block at the beginning of the year      | 458.34                                | 458.34                          | 458.34              | 480.48                                | 480.48                          | 480.48              |
| 2       | Opening CWIP                                  | 77.31                                 |                                 |                     | 94.69                                 |                                 |                     |
| 3       | Less: Opening debts                           | 13.16                                 |                                 |                     | 11.51                                 |                                 |                     |
| 4       | Less: Accumulated depreciation                | 211.42                                | 211.42                          | 211.42              | 231.7                                 | 229.29                          | 229.29              |
| 5       | Net fixed assets                              | 311.07                                | 246.92                          | 246.92              | 331.96                                | 251.19                          | 251.19              |
| 6       | Less: Accumulated consumer contribution       |                                       | 3.22                            | 3.22                |                                       | 5.35                            | 5.35                |
| 7       | Net fixed assets at the beginning of the year | 311.07                                | 243.7                           | 243.7               | 331.96                                | 245.84                          | 245.84              |
| 8       | Rate of Return on capital base                | 3.00%                                 | 3.00%                           | 3.00%               | 3.00%                                 | 3.00%                           | 3.00%               |
| 9       | Reasonable Return                             | 9.33                                  | 7.31                            | 7.31                | 9.96                                  | 7.38                            | 7.38                |

The Commission approves the return on capital base for FY 2011-12 and FY 2012-13, as given below:

**Table 5.31: Return on capital base for FY 2011-12 and FY 2012-13 approved by the Commission**

| Particulars            | (Rs. Cr)                            |                                     |
|------------------------|-------------------------------------|-------------------------------------|
|                        | FY 2011-12<br>(Approved in True up) | FY 2012-13<br>(Approved in True up) |
| Return on Capital Base | 7.31                                | 7.38                                |

## 5.17 Non-Tariff Income

### Petitioner's Submission

The Petitioner has submitted that Non-tariff Income comprises of late payment charges, interest on staff loan, Income from trading, etc. The details of non-Tariff Income, provided by the utility for FY 2011-12 and FY 2012-13, are given below:

**Table 5.32: Non-Tariff Income submitted by the Petitioner**

| Sl. No. | Particulars                    | (Rs. Cr)                              |  |                                       |  |
|---------|--------------------------------|---------------------------------------|--|---------------------------------------|--|
|         |                                | FY 2011-12                            |  | FY 2012-13                            |  |
|         |                                | Approved in T.O dated 10th April 2013 | Petitioner submission (audited accounts) | Approved in T.O dated 10th April 2013 | Petitioner submission (audited accounts) |
| 1       | UI Sales / Sales to Exchange   |                                       | 167.78                                   |                                       | 103.42                                   |
| 2       | Income from trading            |                                       | 0.18                                     |                                       | 0.10                                     |
| 3       | Misc. Receipts/income          |                                       | 2.88                                     |                                       | 4.66                                     |
| 4       | <b>Total income</b>            | -                                     | <b>170.83</b>                            | -                                     | <b>108.18</b>                            |
| 5       | Add: Prior Period income       |                                       |  |                                       |  |
| 6       | <b>Total Non Tariff income</b> | <b>170.83</b>                         | <b>170.83</b>                            | <b>51.88</b>                          | <b>108.18</b>                            |

The Petitioner has requested the Commission to allow the Non-Tariff Income as above.

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

The Non-Tariff Income submitted by the Petitioner for FY 2011-12 and FY 2012-13 is approved, as shown below:

**Table 5.33: Non-Tariff Income Approved by the Commission for FY 2011-12 and FY 2012-13**

| Particulars       | (Rs. Cr)  |                     |   |                     |
|-------------------|---|---------------------|---|---------------------|
|                   | FY 2011-12  |                     | FY 2012-13  |                     |
|                   | Approved in the TO dated 10 <sup>th</sup> April, 2013 | Approved in True up | Approved in the TO dated 10 <sup>th</sup> April, 2013 | Approved in True up |
| Non-Tariff Income | 170.83  | 170.83              | 51.88   | 108.18              |

The Commission approves the Non-Tariff Income at Rs. 170.83 Cr and Rs. 108.18 Cr for FY 2011-12 and FY 2012-13 respectively.

### **5.18 Revenue from Sale of Power at the Existing Tariff for FY 2011-12 and FY 2012-13**

#### **Petitioner's Submission**

The Petitioner has submitted that the revenue from the sale of power for FY 2011-12 and FY 2012-13 approved by the Commission in the Tariff Order dated 10<sup>th</sup> April, 2013 was Rs. 690.50 Cr and Rs. 799.94 Cr for FY 2011-12 and FY 2012-13 respectively. The category wise energy sales both in quantum and amount as per audited accounts of the respective years are shown in Table below:

Table 5.34: Revenue from the Existing Tariff approved for FY 2011-12 and FY 2012-13

| S. No. | Category of Consumer                            | Sales (MU)      | Revenue (Rs. Cr) | Sales (MU)      | Revenue (Rs. Cr) |
|--------|---|-----------------|------------------|-----------------|------------------|
|        |   | FY 2011-12      |                  | FY 2012-13      |                  |
|        |   |                 |                  |                 |                  |
|        | <b>LT Category</b>                              |                 |                  |                 |                  |
| 1      | Domestic & Cottage                              | 537.39          | 75.42            | 581.11          | 84.41            |
| 2      | OHOB  | 9.84            | 0.64             | 10.00           | 0.82             |
| 3      | Commercial al                                   | 167.68          | 57.54            | 182.30          | 75.05            |
| 4      | Agriculture                                     | 56.56           | 0.67             | 56.80           | 1.79             |
| 5      | Public lighting                                 | 24.00           | 6.96             | 27.90           | 9.49             |
| 6      | LT Industrial                                   | 133.59          | 37.22            | 142.53          | 48.18            |
| 7      | Water tanks                                     | 50.80           | 14.73            | 54.71           | 19.97            |
| 8      | Temporary Supply - LT&HT                        | 14.00           | 7.00             | 20.27           | 11.84            |
|        | <b>Total LT</b>                                 | <b>993.86</b>   | <b>200.19</b>    | <b>1,075.62</b> | <b>251.54</b>    |
|        | <b>HT Category</b>                              |                 |                  |                 |                  |
| 9      | HT 1 Industrial / Commercial                    | 974.60          | 356.19           | 1,015.38        | 431.97           |
| 10     | HT 2 - Government & water tanks                 | 45.03           | 17.07            | 45.48           | 19.23            |
| 11     | HT 3 – EHT                                      | 307.80          | 117.04           | 338.50          | 139.01           |
| 12     | <b>Total HT</b>                                 | <b>1,327.43</b> | <b>490.29</b>    | <b>1,399.36</b> | <b>590.21</b>    |
| 13     | <b>Total</b>                                    | <b>2,321.29</b> | <b>690.48</b>    | <b>2,474.98</b> | <b>841.75</b>    |
| 14     | <b>FPPCA Charges collected during the year</b>  |                 | -                |                 | 42.80            |
| 15     | <b>Total Revenue for the Year</b>               | <b>2,321.29</b> | <b>690.48</b>    | <b>2,474.98</b> | <b>884.55</b>    |
| 16     | As approved in the Tariff Order 10th April 2013 | 2,317.50        | 690.50           | 2,348.49        | 799.94           |

### 5.19 Aggregate Revenue Requirement for FY 2011-12 and FY 2012-13

#### Petitioner's Submission

The Petitioner has submitted the Aggregate Revenue Requirement for FY 2011-12 and FY 2012-13, the amount claimed in True up and approved by the Commission as given in the Table below:



Table 5.35: Calculation of ARR for FY 2011-12 and FY 2012-13

| Particulars                              | FY 2011-12  |  |                     | FY 2012-13  |  |                     |
|--|---|--|---------------------|---|--|---------------------|
|  | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (Audited accounts) | Approved in True up | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (Audited accounts) | Approved in True up |
| Cost of power purchase                   | 1,095.08  | 1,097.74                                 | 1,096.45            | 893.23  | 992.47                                   | 976.99              |
| Employee Costs                           | 54.15   | 57.11                                    | 57.11               | 58.40   | 65.27                                    | 65.27               |
| Administration and General Expenses      | 4.44  | 4.00                                     | 4.00                | 4.84  | 3.45                                     | 3.45                |
| R&M Expenses                             | 16.17   | 16.18                                    | 16.18               | 17.06   | 9.92                                     | 9.92                |
| Depreciation                             | 20.28   | 17.87                                    | 17.87               | 23.39   | 21.96                                    | 21.96               |
| Interest and finance charges             | 7.87  | 6.99                                     | 6.99                | 11.37   | 13.10                                    | 13.10               |
| Interest on working capital              |   | 4.38                                     | 4.36                |   | 2.39                                     | 2.20                |
| Return on NFA /Equity                    | 9.33  | 9.24                                     | 7.31                | 9.96  | 9.74                                     | 7.38                |
| Provision for Bad Debt                   | -   | -  | -                   | -   | -  | -                   |
| Interest on Consumer Security Deposit    | -   | -  | -                   | 12.67   | -  | -                   |
| <b>Total Revenue Requirement</b>         | <b>1207.32</b>                                    | <b>1213.51</b>                           | <b>1210.27</b>      | <b>1030.92</b>                                    | <b>1118.30</b>                           | <b>1100.27</b>      |
| Less: Non Tariff Income                  | 170.83  | 170.83                                   | 170.83              | 51.88   | 108.18                                   | 108.18              |
| <b>Net Aggregate Revenue Requirement</b> | <b>1036.49</b>                                    | <b>1042.68</b>                           | <b>1039.44</b>      | <b>979.04</b>                                     | <b>1010.12</b>                           | <b>992.09</b>       |

## 5.20 Revenue Gap for FY 2011-12 and FY 2012-13

The Revenue Gap approved by the Commission in the Tariff Order dated 10<sup>th</sup> April 2013 was Rs. 345.99 Cr. for FY 2011-12 and Rs. 179.10 Cr. for FY 2012-13.

Details of the Revenue Gap (approved, the actual amount and the quantum approved in the final true up) for FY 2011-12 and FY 2012-13 are shown in the Table below:

Table 5.36: Revenue Gap approved by the Commission for FY 2011-12 and FY 2012-13

| S. No. | Particulars                   | FY 2011-12  |  |                     | FY 2012-13  |  |                     |
|--------|-------------------------------|---|--|---------------------|---|--|---------------------|
|        |                               | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (Audited accounts) | Approved in True up | Approved in T.O dated 10 <sup>th</sup> April 2013 | Petitioner submission (Audited accounts) | Approved in True up |
| 1      | Aggregate Revenue Requirement | 1036.49   | 1042.68                                  | 1039.44             | 979.04  | 1010.12                                  | 992.09              |
| 2      | Revenue from Sale of Power    | 690.50  | 690.48                                   | 690.48              | 799.94  | 884.55                                   | 884.55              |
| 3      | Revenue Gap/(Surplus )        | 345.99  | 352.20                                   | 348.96              | 179.10  | 125.57                                   | 107.54              |

## 6. Provisional True up of FY 2013-14

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### 6.1 Provisional True up of FY 2013-14

#### **Petitioner's Submission:**

The Petitioner, the Electricity Department of Puducherry (PED), has submitted the provisional true up (Provisional Actual Performance) for FY 2013-14 in the petition filed for determination of ARR and tariff for the control period FY 2015-16 to FY 2017-18.

The Petitioner has submitted that the audit of the annual accounts for FY 2013-14 is in process, therefore, it has submitted the provisional actuals for FY 2013-14 in this Petition for provisional true up and comparison of the approved figures by the Commission, vide the Tariff Order Dated 25<sup>th</sup> April, 2014, has also been furnished. The PED has further submitted that since the accounts have already been finalised, the verification with the Audited Accounts may be marginal.

#### **Commission's analysis**

The Commission has reviewed the ARR for FY 2013-14 in its tariff order dated 25<sup>th</sup> April, 2014.

The True-up of FY 2013-14 is to be carried out as per the provisions of Regulation 8 of JERC (Terms and Conditions for determination of tariff) Regulations, 2009 [the Regulation 8 of JERC Tariff Regulations, 2009] which is reproduced below:

#### ***"8. Review and Truing up***

*(1) The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actual of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'.*

*(2) (i) After audited accounts of a year are made available, the Commission shall undertake a similar exercise, as above, with reference to the final actual figures as per the audited accounts. This exercise, with reference to audited accounts, shall be called 'Truing Up'.*

*(ii) The Truing Up for any year will ordinarily not be considered after more than one*

year of 'Review'.

(3) *The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.*

(4) -----

(5) -----

(6) -----

(7) -----“

During the technical validation session held at the Commission's office, the Commission had further enquired about the status of availability of audited accounts. The Petitioner responded stating that the accounts for FY 2013-14 are under preparation.

The Commission has observed that the provisional actual data for FY 2013-14 is not supported by audited accounts. In the absence of audited accounts, the Commission is not in a position to approve the ARR and revenue gap for FY 2013-14 based on the actuals. The Commission, therefore, has kept the figures of income and expenditure and other constitutes of the ARR unchanged i.e. at the same level as approved last time during the review of FY 2013-14 as per the tariff order dated 25<sup>th</sup> April, 2014. The same would be re-visited once the true-up petition is filed before the Commission along with the audited accounts for FY 2013-14.

The Summary of the ARR and revenue gap for FY 2013-14 for purposes of Review of FY 2014-15 and ARR for FY 2015-16 considered by the Commission in this tariff order for reference is presented below.

**Table 6.1: ARR and revenue gap considered by the Commission for FY 2013-14 (Rs. Cr.)**

| Particulars   | FY 2013-14   |                     |
|---|--|---------------------|
|   | Approved by the Commission (Review) in T.O. dated 25 <sup>th</sup> April, 2014 | Provisional Actuals |
| Cost of power purchase including RPO Provision to meet obligation of the previous years | 1002.78  | 994.04              |
| Employee costs  | 64.73  | 72.70               |
| Administrative and General expenses   | 3.96   | 7.25                |
| R&M expenses  | 18.06  | 13.46               |

| Particulars                              | FY 2013-14   |                     |
|--|--|---------------------|
|  | Approved by the Commission (Review) in T.O. dated 25 <sup>th</sup> April, 2014 | Provisional Actuals |
| Depreciation                             | 23.65  | 23.38               |
| Interest & Finance Charges               | 13.88  | 17.43               |
| Interest on working Capital + Int on CSD | 7.18   | -                   |
| Return on NFA/Equity                     | 9.87   | 10.14               |
| Provision for Bad Debt                   | -  | -                   |
| Total Revenue Requirement                | 1144.11  | 1138.40             |
| Less: Non Tariff Income                  | 16.50  | 28.28               |
| Net Aggregate Revenue Requirement        | 1127.61  | 1110.13             |
| Revenue from sale of power               | 1084.99  | 1045.53             |
| Revenue Gap/ (Surplus)                   | 42.62  | 64.60               |

The Commission directs the Petitioner to file separate true up petition for FY 2013-14 along with audited accounts while filing the next tariff petition for the FY 2016-17.

## 7. Annual Performance Review for FY 2014-15

### 7.1 Background

The Petitioner, in its Petition for Annual Performance Review (APR) for FY 2014-15, has estimated the energy sales expenditure and revenue for FY 2014-15 based on actual energy sales, expenditure and revenue for the first half (H1) of FY 2014-15 and provided the estimates of energy sales, expenditure and revenue for FY 2014-15, based on the actuals of H1 against each head.

The Performance of FY 2014-15 (revised estimate) is compared with the ARR approved for FY 2014-15 in the Tariff Order dated 25<sup>th</sup> April, 2014.

The Commission has analysed the consumers' connected load and energy sales and components of expenditure and revenue under performance review for FY 2014-15 in this chapter.

### 7.2 Number of Consumers

#### Petitioner's Submission

The Petitioner has submitted the revised estimates of number of consumers for FY 2014-15, as given in Table below:

**Table 7.1: Revised estimates of number of consumers submitted for FY 2014-15 (RE)**

| Category of Consumers      | Approved by Commission in the T.O. dated 25 <sup>th</sup> April, 2014 | Revised Estimates for FY 2014-15 |
|----------------------------|---|----------------------------------|
| <b>LT</b>                  |   |                                  |
| Domestic (incl OHOB)       | 304,000   | 317,305                          |
| Commercial                 | 45,500  | 46,511                           |
| Agriculture                | 6,888   | 6,836                            |
| Public Lighting            | 49,500  | 49,891                           |
| Industrial and Water Tanks | 6,350   | 6,424                            |
| <b>Total LT</b>            | <b>412,238</b>  | <b>426,967</b>                   |
| <b>HT</b>                  |   |                                  |
| Industrial                 | 411   | 415                              |
| State & Central Govt Ests. | 49  | 51                               |
| Industrial EHT             | 9   | 7                                |
| <b>Total HT</b>            | <b>469</b>  | <b>473</b>                       |
| <b>Total</b>               | <b>412,707</b>  | <b>427,440</b>                   |

### Commission's analysis

The Revised Estimate of category wise consumers projected by the petition for FY 2014-15 in review is considered reasonable and hence the same are approved for FY 2014-15 (Review) as shown in the table 7.1.

## 7.3 Energy Sales

### Petitioner's Submission

The Petitioner, in its Petition, has estimated the Energy Sales based on actuals for the first half (H1) of FY 2014-15 and estimated for the second half of the year. EDP has submitted the category-wise energy sales approved in Tariff Order dated 25<sup>th</sup> April, 2014 and the revised estimates for FY 2014-15, as given in the Table below:

**Table 7.2: Revised Category-wise Sales submitted for FY 2014-15 (RE)**

| Category of Consumers       | Claimed by The Petitioner | Approved by the Commission in the T.O. dated 25 <sup>th</sup> April, 2014 | Revised Estimates                       |                 |
|-----------------------------|---------------------------|---|---|-----------------|
|                             |                           |   | (Apr. 2014 Sep. 2014) – first Half year | FY 2014-15      |
| <b>LT</b>                   |                           |   |   |                 |
| Domestic (incl OHOB)        | 624.70                    | 620.57  | 351.97                                  | 703.94          |
| Commercial                  | 190.10                    | 179.36  | 93.92                                   | 187.84          |
| Agriculture                 | 57.00                     | 56.63   | 28.50                                   | 57.00           |
| Public Lighting             | 28.40                     | 29.15   | 13.00                                   | 26.00           |
| Industrial                  | 250.50                    | 271.54  | 99.56                                   | 199.12          |
| Temporary Supply            | 20.00                     | 20.00   | 7.00                                    | 14.00           |
| <b>Total LT</b>             | <b>1,170.70</b>           | <b>1,177.25</b>   | <b>593.95</b>                           | <b>1,187.90</b> |
| <b>HT</b>                   |                           |   |   |                 |
| Industrial                  | 980.00                    | 929.28  | 448.97                                  | 897.94          |
| State & Central Govt. Ests. | 50.00                     | 50.00   | 29.80                                   | 59.60           |
| Industrial EHT              | 324.00                    | 345.57  | 167.67                                  | 335.34          |
| <b>Total HT</b>             | <b>1354.00</b>            | <b>1324.85</b>  | <b>646.44</b>                           | <b>1,292.88</b> |
| <b>Total</b>                | <b>2524.70</b>            | <b>2502.10</b>  | <b>1240.39</b>                          | <b>2,480.78</b> |

(MU)

The Petitioner has estimated energy sales for FY 2014-15 under revised estimates at 2480.78 MU, as against the approved sales of 2502.10 MU in the Tariff Order.

### Commission's Analysis

The Petitioner has projected that the revised energy sales for FY 2014-15 have been considered at two times the actual H1 sales considering the average sales growth.

The estimated sales for domestic category have increased by 83 MU. However, the sales for LT industry have decreased by 72.54 MU. The EDP has estimated that industrial sales are not likely to grow to the extent envisaged by the Commission.

The PED has furnished the energy sales for H1 and H2 of FY 2011-12, FY 2012-13 and FY 2013-14 to arrive at H2 sales of FY 2014-15. It is observed that while H2 sales of FY 2012-13 and FY 2013-14 are higher than H1 sales. This is the same in some of the categories. Hence, the sales projected by the Petitioner for FY 2014-15 are considered as they are only estimated sales subject to True up.

The Commission considers the revised sales at 2480.78 MU against sales of 2502.10 MU as approved in the Tariff Order for FY 2014-15.

#### **7.4 Distribution Loss**

##### **Petitioner's submission**

The Petitioner has submitted that the Distribution loss was 12.60%, as against the level of 12.00% approved by the Commission in the Tariff Order dated 25<sup>th</sup> April, 2014. The Petitioner has submitted that the PED has achieved significant achievement in reduction of distribution loss and that it will continue the efforts to reduce the losses. The loss reduction is a slow process and the losses have come down and further reduction is rather difficult since it has already reached 13.00%.

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

The Commission has analysed the past trends and fixed T&D loss at 12.00% for FY 2014-15 in the Tariff Order dated 25<sup>th</sup> April, 2014. Considering the nature of loads and the area of distribution, there is no justification to increase the distribution loss level from 12.00% to 12.6%. The Commission retains the distribution loss at 12.00% in the revised estimates, as mentioned below:

**Table 7.3: Distribution Loss approved by the Commission for FY 2014-15 (RE)**

| <b>Particulars</b> | <b>Approved in the TO dated 25<sup>th</sup> April, 2014</b> | <b>Submitted by the Petitioner in the Review</b> | <b>Revised Loss level approved by the Commission for FY 2014-15 (RE)</b> |
|--------------------|---|--|--|
| Distribution Loss  | 12.00%  | 12.60%   | 12.00%   |

## 7.5 Energy Requirement /Energy Balance for FY 2014-15

### Petitioner's submission

Based on the revised energy sales and distribution loss and Inter State Transmission (Losses), the PED has projected the energy requirement and the Energy availability, etc., in the Table below:

**Table 7.4: Energy Balance projected by the PED for FY 2014-15(RE)**

| S. No | Particulars                              | FY 2014-15      |   |                              |                 |
|-------|--|-----------------|---|------------------------------|-----------------|
|       |  | Claimed         | Approved in the T.O. dated 25 <sup>th</sup> April, 2014 | Revised Estimates            |                 |
|       |  |                 |   | H1 – (Apr. 2014 - Sep. 2014) | FY 2014-15      |
| A     | <b>ENERGY REQUIREMENT</b>                |                 |   |                              |                 |
| A     | Energy sales in the UT (MU)              | 2,524.70        | 2,502.09  | 1,240.17                     | 2,480.78        |
| 2     | Distribution losses (%age)               | 12.50%          | 12.00%  | 12.73%                       | 12.60%          |
| 3     | Energy required for the Territory (MU)   | 2,885.37        | 2,843.29  | 1,421.08                     | 2,838.42        |
| 4     | Add: Sales to common pool Consumers / UI | -               | -   | 41.80                        | 41.80           |
| 5     | Energy Requirement @ Periphery           | <b>2,885.37</b> | <b>2,843.29</b>   | <b>1,462.89</b>              | <b>2,880.22</b> |
| B     | <b>ENERGY AVAILABILITY</b>               |                 |   |                              |                 |
| 1     | Gross Energy Purchase                    | 2,995.72        | 2,975.20  | 1,533.61                     | 3,016.76        |
| 2     | <b>External losses (MU)</b>              | 110.35          | 131.91  | 70.72                        | 136.54          |
| 3     | <b>Net Energy Availability</b>           | <b>2,885.37</b> | <b>2,843.29</b>   | <b>1,462.89</b>              | <b>2,880.22</b> |

### Commission's Analysis

Based on the approved energy sales of 2480.78 MU and distribution loss of 12.00%, the Commission has arrived at energy requirement and energy balance at the distribution periphery and revised the power purchase for FY 2014-15, as discussed in Para 7.5 subsequently.

**Table 7.5: Energy Balance approved for FY 2014-15 (Revised Estimates)**

| Sl. No. | Particulars                             | Petitioner's submission | Revised Estimates approved |
|---------|---|-------------------------|----------------------------|
| 1       | Energy Sales                            | 2480.78                 | 2480.78                    |
| 2       | Distribution Losses (%)                 | 12.60                   | 12.00                      |
|         | Distribution Energy                     | 357.69                  | 338.29                     |
| 3       | Energy Requirement for territories (MU) | 2838.42                 | 2819.07                    |
| 4       | Sales to Common Pool Consumers/UI       | 41.80                   | 41.80                      |
| 5       | Energy requirement @ periphery          | 2880.22                 | 2860.87                    |
|         | <b>Energy Availability</b>              |                         |                            |
| 7       | Gross Energy Purchase                   | 3016.76                 | 2996.47                    |
| 8       | External Losses                         | 136.54                  | 135.60                     |



| <b>Sl. No.</b> | <b>Particulars</b>   | <b>Petitioner's submission</b> | <b>Revised Estimates approved</b> |
|----------------|----------------------|--------------------------------|-----------------------------------|
| 9              | Net Energy Available | 2880.22                        | 2860.87                           |

The Commission considers energy requirement at the State UT periphery at 2860.87 MU, as against 2880.22 MU projected by the EDP.

## **7.6 Power Purchase Quantum and Cost**

### **Petitioner's Submission**

Puducherry Electricity Department (PED) meets the total Power purchase from the following sources:

- Allocation from Central Generating Stations (CGS)
- TANGEDCO
- KSEB, and
- PPCL

PPCL is a generating company within the UT of Puducherry, catering to the Karaikal region of PED.

- a) Power purchase for H1 (first half year) of FY 2014-15 is considered on actual basis and for H2 (second half year) of FY 2014-15, under the principles of Merit Order Despatch (MOD).
- b) Fixed Charges for all the generating stations have been taken at the same level as incurred in H1 for FY 2014-15.
- c) Variable cost for FY 2014-15 has been computed, considering actual average variable cost of each source for first 6 months period (April to September, 2014). No escalation of cost has been considered.
- d) Other costs, which includes ED, Cess, Incentive etc., and supplementary charges have been considered on actual basis paid for first 6 months period April to September, 2014 and have not been assumed for H2 at present and may be considered at the time of True up.
- e) Power purchase cost for power overdrawal from the grid has been considered on actual basis paid in first 6 months period of April to September, 2014 only. For H2, overdrawal has not been assumed under the principles of MoD.
- f) In view of breakdown of PPCL Plant, the power purchase from the plant has been considered for 6 months (H1) in the year FY 2014-15 and the generation in

H2 has been taken at reduced level. This has resulted in purchase of higher quantum from TANGEDCO.

- g) Transmission charges for FY 2014-15 have been considered as per PoC computation. i.e., part- A. Transmission charges for withdrawal of power and Part -B Transmission Charges for generation. However, for H2 of FY 2014-15, similar charges in H1 of FY 2014-15 have been considered.

The Petitioner has estimated the quantum of power purchase and the cost, as discussed above. The summary of quantum of power purchase and the cost is given in the Table below:

**Table 7.6: Power Purchase Cost for FY 2014-15 submitted by the Petitioner**

| S. No | Particulars          | Purchase (MUs)  | Cost (Rs. Cr.) | Rate (Rs/Unit) |
|-------|----------------------|-----------------|----------------|----------------|
| 1     | NTPC                 | 1034.62         | 299.64         | 2.90           |
| 2     | NLC                  | 889.55          | 259.69         | 2.92           |
| 3     | NPCIL                | 390.20          | 81.15          | 2.08           |
| 4     | KSEB                 | 41.49           | 21.88          | 5.27           |
| 5     | TANGEDCO             | 428.72          | 148.78         | 3.47           |
| 6     | PPCL                 | 114.95          | 56.98          | 4.96           |
| 7     | Vallur               | 91.90           | 33.26          | 3.62           |
| 8     | Transmission Charges |                 | 63.38          |                |
| 9     | Over-Drawl           | 25.34           | 1.38           | 0.54           |
| 10    | Rebate               |                 | -12.49         |                |
|       | <b>Total</b>         | <b>3,016.76</b> | <b>953.65</b>  | <b>3.16</b>    |

The Petitioner has requested the Commission to approve the power purchase of 3016.76 MU, at a cost of Rs. 953.65 Cr, in the revised estimates for FY 2014-15.

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

For estimating the power purchase and the cost, merit order principles have been followed. Since the purchase is on merit order, the full fixed costs have been considered. The variable cost has been considered based on the source-wise cost allowed in the merit order. No variable cost is allowed for energy not considered in the merit order (according to merit order despatch).

**Share Allocation:** Share allocation is considered as per the notification of Southern Region Power Committee, vide SRPC/SE-1/54/VA/2014 dated 29.01.2014, effective from 0.00 Hrs on 30.01.2014.

**Gross Energy Availability:** Gross Energy Availability has been estimated, based on the installed capacity and the average load factor for the past years. The Net Energy

sent out has been considered, after considering the applicable Auxiliary Consumption, as per CERC (Terms and Conditions) of Tariff Regulation.

**Fixed Charges:** The actual fixed charges paid during H1 of FY 2014-15 have been considered without any escalation for estimation of revised power purchase for FY 2014-15.

**Variable Charges:**

- The average variable cost paid for the period April to September, 2014 has been considered for computation of variable charges for FY 2014-15. For Nuclear Plants, Madras APS and Kaiga, the cost @ Rs. 2.08/unit has been considered.
- For TNEB, the average rate of Rs. 3.47/unit has been considered, and for KSEB, the average rate of Rs. 5.27/unit has been considered. For PPCL, the average rate Rs. 4.96/unit has been considered. For Vallur, an average rate of Rs. 3.62/unit has been considered. Fixed charges from all stations (irrespective of merit order) have been considered for arriving at the power purchase cost.
- **PGCIL Losses:** PGCIL losses have been assumed at 5% of (as per SRPC Website) and TNEB losses at 4%. For PPCL and KSEB, external losses have not been considered.

**Transmission Charges:** The Transmission Charges for the usage of PGCIL network and POSOCO & PGCIL Charges have been considered at Rs. 63.38 Cr, as applicable.

The Commission has approved power purchase of 2996.47 MU considering distribution loss at 12% as against power purchase of 3016.76 MU projected by the Petitioner (considering distribution loss at 12.60%). Accordingly, the cost of disallowed power purchase of 20.29 MU considering the energy rate at Rs. 2.50/Unit (Simhadri stage II) of Rs. 5.07 Cr. is reduced from the total Power purchase cost.

The Total Power Purchase Quantum and Cost approved by the Commission in the revised estimate for FY 2014-15 is summarised below:

**Table 7.7: Summary of Power Purchase Cost Approved by the Commission for FY 2014-15**

| Sl. No | Particulars | Purchase (MUs) | Cost (Rs. Cr.) | Rate (Rs/Unit) |
|--------|-------------|----------------|----------------|----------------|
| 1      | NTPC        | 1034.62        | 299.64         | 2.90           |
| 2      | NLC         | 889.55         | 259.69         | 2.92           |
| 3      | NPCIL       | 390.20         | 81.15          | 2.08           |
| 4      | KSEB        | 41.49          | 21.88          | 5.27           |
| 5      | TANGEDCO    | 428.72         | 148.78         | 3.47           |

| Sl. No | Particulars                      | Purchase (MUs)  | Cost (Rs. Cr.) | Rate (Rs/Unit) |
|--------|----------------------------------|-----------------|----------------|----------------|
| 6      | PPCL                             | 114.95          | 56.98          | 4.96           |
| 7      | Vallur                           | 91.90           | 33.26          | 3.62           |
| 8      | Transmission Charges             |                 | 63.38          |                |
| 9      | Overdrawal                       | 25.34           | 1.38           | 0.54           |
| 10     | Rebate                           |                 | -12.49         |                |
|        | <b>Total</b>                     | <b>3,016.76</b> | <b>953.65</b>  | <b>3.16</b>    |
| 11     | Less : Disallowed Power Purchase | 20.29           | 5.07           |                |
| 12     | <b>Net Power Purchase</b>        | <b>2996.47</b>  | <b>948.58</b>  |                |

## 7.7 Renewable Purchase Obligation

### Petitioner's submission

The Petitioner has submitted the RPO compliance cost which works out to Rs. 16.97 Crore as shown in below table.

**Table 7.8: Renewable Power Purchase Obligation (RPO) submitted by the Petitioner FY 2014-15**

| Year    | Sales | Solar Obligation | Non-Solar Obligation | Solar PO | Non-Solar PO | Solar REC cost | Non-Solar REC Cost | Total Cost |
|---------|-------|------------------|----------------------|----------|--------------|----------------|--------------------|------------|
|         | (MU)  | %                | %                    | (MUs)    | (MUs)        | (Rs/REC)       | (Rs/REC)           | (Rs. Cr)   |
| 2014-15 | 2,481 | 0.60%            | 2.70%                | 14.88    | 66.98        | 4,650          | 1,500              | 16.97      |

### Commission's analysis

The Commission has considered the RPO compliance cost at Rs. 15.26 Cr. considering the floor price of solar REC at Rs. 3500 per REC as approved by the CERC in Suo-moto petition SM/016/2014 dated 30<sup>th</sup> December, 2014 as given in the table below:

**Table 7.9: Renewable Power Purchase Obligation (RPO) Approved by the Commission for FY 2014-15**

| Sl. No. | Renewable Energy Sources | Purchase (MU) | Price Rs./REC | Total Cost (Rs. Cr) |
|---------|--------------------------|---------------|---------------|---------------------|
| 1       | Solar                    | 14.88         | 3500          | 5.21                |
| 2       | Non-Solar                | 66.98         | 1500          | 10.05               |
|         | <b>Total</b>             |               |               | <b>15.26</b>        |

This RPO compliance Cost has been factored in the ARR of FY 2014-15 (RE).

### 7.7.1 Cumulative RPO pending compliance by the Petitioner:

#### Petitioner's Submission:

The Petitioner has submitted that net RPO cost to be claimed from FY 2015-16 onwards works out to Rs 48.27 crore and has requested the Commission to allow the

same to be purchased after FY 2014-15. The details given by the Petitioner are outlined in the Table given below:

**Table 7.9.1: Cumulative RPO to be claimed in MYT Control Period**

| Sl. No | Description                                      | Unit    | Previous Year (Audit) |            |            | Previous Year (Provisional) | Current Year FY 2014-15 (RE) | Cumulative RPO to be purchased in Control Period |
|--------|--|---------|-----------------------|------------|------------|-----------------------------|------------------------------|--|
|        |  |         | FY 2010-11            | FY 2011-12 | FY 2012-13 | FY 2013-14                  |                              |  |
| 1      | Sales within State                               | MUs     | 2182.48               | 2321.29    | 2474.98    | 2365.72                     | 2480.78                      |  |
| 2      | RPO Obligation                                   | %       | 1.00%                 | 2.00%      | 3.00%      | 3.00%                       | 3.30%                        |  |
|        | Solar  | %       | 0.25%                 | 0.30%      | 0.40%      | 0.40%                       | 0.60%                        |  |
|        | Non Solar  | %       | 0.75%                 | 1.70%      | 2.60%      | 2.60%                       | 2.70%                        |  |
| 3      | RPO Obligation                                   | MUs     | 21.82                 | 46.43      | 74.25      | 70.97                       | 81.87                        | 295.34   |
|        | Solar  | MUs     | 5.46                  | 6.96       | 9.90       | 9.46                        | 14.88                        | 46.67  |
|        | Non Solar  | MUs     | 16.37                 | 39.46      | 64.35      | 61.51                       | 66.98                        | 248.67   |
| 4      | Actual RPO Purchased                             | MUs     | -                     | -          | 48.00      | 112                         | 25                           | 185  |
|        | Solar  | MUs     | -                     | -          | -          | -                           | 6                            | 6  |
|        | Non Solar  | MUs     | -                     | -          | 48.00      | 112                         | 19                           | 179  |
| 5      | Cumulative RPO Obligation                        | MUs     | 21.82                 | 68.25      | 94.50      | 53.47                       | 110.34                       | 110.34   |
|        | Solar  | MUs     | 5.46                  | 12.42      | 22.32      | 31.78                       | 40.67                        | 40.67  |
|        | Non Solar  | MUs     | 16.37                 | 55.83      | 72.18      | 21.69                       | 69.67                        | 69.67  |
| 6      | Floor Price of REC Certificates /MWH             |         |                       |            |            |                             |                              | Rs. 48.27 Cr                                     |
|        | Solar  | Rs./MWH | 9300                  |            |            |                             |                              | Rs. 37.82 Cr                                     |
|        | Non Solar  | Rs./MWH | 1500                  |            |            |                             |                              | Rs. 10.45 Cr                                     |
| 7      | Excess RPO claimed in ARR                        | Rs. Cr  |                       |            |            |                             |                              | Rs. 0.00 Cr                                      |
| 8      | Net RPO Cost to be claimed in MYT Control Period | Rs. Cr  |                       |            |            |                             |                              | Rs. 48.27 Cr                                     |

### Commission's analysis

The Commission observes that the following provisions were made towards RPO compliance cost in the ARRs of respective years as under:

|   |          |                  |                  |
|---|----------|------------------|------------------|
| <b>1. ARR of FY 2013-14 (Review)</b>                                    | <b>:</b> | <b>Rs. Crore</b> | <b>Rs. Crore</b> |
| <b>(Tariff Order dated 25<sup>th</sup> April 2014)</b>                  |          |                  |                  |
| - For FY 2013-14  |          | 18.33            |                  |
| - A separate provision to meet arrears towards RPO                      |          | 29.15            | 47.48            |
| <b>2. ARR of FY 2014-15 (Review) in the present Tariff Order</b>        |          |                  | 15.26            |
| <b>3. Total provisions approved in ARRs to meet RPO till FY 2014-15</b> | <b>:</b> |                  | 62.74            |

The Petitioner has submitted in the petitions that the actual RPOs purchased and the cost of purchase under provisional unaudited accounts for FY 2013-14 and Revised

Estimates of FY 2014-15 respectively. The RPOs purchased during FY 2012-13 was approved by the Commission in the True up of FY 2012-13. The summary of the actual RPOs purchased year wise is given below:

| Sl. No. | Financial Year | Purchase Qty (MU) |            |            | Purchase Cost (Rs. Crore) |              |              | Remarks   |
|---------|----------------|-------------------|------------|------------|---------------------------|--------------|--------------|---|
|         |                | Solar             | Non Solar  | Total      | Solar                     | Non Solar    | Total        |   |
| 1       | FY 2012-13     | -                 | 48         | 48         | -                         | 8.65         | 8.65         | Approved by the Commission in true up of FY 2012-13                                   |
| 2       | FY 2013-14     | -                 | 112        | 112        | -                         | 15.71        | 15.71        | Provisional actuals submitted by the Petitioner                                       |
| 3       | FY 2014-15     | 6                 | 19         | 25         | 2.10                      | 2.85         | 4.95         | Purchase cost considered by the Commission at the latest floor price notified by CERC |
|         | <b>Total</b>   | <b>6</b>          | <b>179</b> | <b>185</b> | <b>2.10</b>               | <b>27.21</b> | <b>29.31</b> |   |

As against the provision of Rs. 62.74 Crore, made in the ARRs of respective years, the actual purchases were made for Rs. 29.31 Crore, thus leaving a balance provision of Rs. 33.43 Crore.

The Petitioner in the table submitted by them requested for carry forward of the following unfulfilled RPO at the end of FY 2014-15 for future years:

Solar RPO : 40.67 MU @ Rs.3500/MWh : Rs. 14.23 Crore

Non- Solar RPO : 69.67 MU @ Rs. 1500/MWh : Rs. 10.45 Crore

Total : Rs. 24.68 Crore

As the balance provision already approved in the earlier years (Rs. 33.43 Crore) is more than the RPOs arrears to be met (Rs. 24.68 Crore), the Commission is not approving any further provision in this regard. The actual purchase cost of RPOs will be considered at the time of True up of FY 2013-14 and True up of FY 2014-15 on the basis of audited accounts to be submitted by the Petitioner. The excess or additional provision will be arrived at after truing up of FY 2014-15 and will be adjusted in the ARRs accordingly.

## 7.8 Operation and Maintenance Expenses

Operation and Maintenance Expenses comprise the Employee Cost, R&M Expenses and A&G Expenses.

### Employee Cost

#### Petitioner's Submission

PED has computed the Employee Expenses for FY 2014-15 based on the escalation in proportion to WPI as on 1<sup>st</sup> April, 2014, considering the base period, as the actual Audited Expenses for FY 2012-13.

PED submitted that the salary component pertaining to staff on deputation/deployed for government building maintenance is not included and as such the employee cost given pertains to Transmission and Distribution activities alone.

The Employee Cost capitalised has also been taken into consideration, along with the employee cost linked to accounts with capital nature. Accordingly, the PED has revised the employee cost for FY 2014-15 to Rs. 75.32 Cr, which includes salaries, dearness allowance, transport allowance, bonus, terminal benefits in the form of pension and gratuity, leave encashment and staff welfare schemes.

#### Commission's Analysis

The Commission approves the Employee Cost at Rs. 75.32 Cr for FY 2014-15 (RE).

**Table 7.10: Employee expenses approved by the Commission for Review of FY 2014-15**

| Particulars       | Approved by the Commission in TO dated 25 <sup>th</sup> April, 2014 | Petitioner Submission (Revised Estimates) | Approved by the Commission (Review) |
|-------------------|---|---|-------------------------------------|
| Employee Expenses | 68.53   | 75.32                                     | 75.32                               |

## Repair and Maintenance Expenses

#### Petitioner's Submission

The Petitioner has submitted that revised R&M Expenses for FY 2014-15 have been claimed, considering the amount as approved by the Commission in the previous Tariff Order dated 25<sup>th</sup> April, 2014, as mentioned below:

**Table 7.11: Revised R&M Expenses for FY 2014-15 (Rs. Cr.)**

| <b>Particulars</b> | <b>Approved by the Commission<br/>in TO dated 25<sup>th</sup> April, 2014</b> | <b>Revised Estimates</b> |
|--------------------|---|--------------------------|
| R&M Expenses       | 19.12   | 19.12                    |

### **Commission's Analysis**

The Commission approves the revised estimates for FY 2014-15 at Rs. 19.12 Cr. as given in the table below:

**Table 7.12: Approved Revised R&M Expenses for Review of FY 2014-15 (Rs. Cr.)**

| <b>Particulars</b> | <b>Approved by the<br/>Commission in TO dated<br/>25<sup>th</sup> April, 2014</b> | <b>Petitioner<br/>Submission<br/>(Revised Estimates)</b> | <b>Approved by the<br/>Commission<br/>(Review)</b> |
|--------------------|---|--|--|
| R & M Expenses     | 19.12   | 19.12  | 19.12  |

### **Administrative and General Expenses**

#### **Petitioner's Submission**

The Petitioner has submitted that A&G Expenses claimed are as approved by the Commission in the Tariff Order dated 12<sup>th</sup> April, 2014 and also that the incentive of Rs. 1.17 Cr to be paid to the consumers has been considered.

**Table 7.13: A&G Expenses for FY 2014-15 (Rs. Cr.)**

| <b>Particulars</b> | <b>Approved by the Commission<br/>in TO dated 25<sup>th</sup> April, 2014</b> | <b>Revised Estimates with<br/>incentives to Consumers</b> |
|--------------------|---|---|
| A&G Expenses       | 4.19  | 5.36  |

### **Commission's Analysis**

The Commission approves the A&G Expenses of Rs. 5.36 Cr. in the Revised Estimates for FY 2014-15 including incentives to consumers.

**Table 7.14: Approved Revised A&G Expenses for Review of FY 2014-15 (Rs. Cr)**

| <b>Particulars</b> | <b>Approved by the<br/>Commission in TO dated<br/>25<sup>th</sup> April, 2014</b> | <b>Petitioner<br/>Submission<br/>(Revised Estimates)</b> | <b>Approved by the<br/>Commission<br/>(Review)</b> |
|--------------------|---|--|--|
| A& G Expenses      | 4.19  | 5.36   | 5.36   |

The Revised O&M Expenses for Review of FY 2014-15 as approved by the Commission are summarised below:



**Table 7.15: O&M Expenses for Review of FY 2014-15 approved by the Commission (Rs. Cr)**

| Particulars            | Approved by Commission in TO dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner | Approved by the Commission (Review) |
|------------------------|---|---|-------------------------------------|
| Employee Expenses      | 68.53   | 75.32   | 75.32                               |
| R&M Expenses           | 19.12   | 19.12   | 19.12                               |
| A&G Expenses           | 4.19  | 5.36  | 5.36                                |
| <b>Total (Rs. Cr.)</b> | <b>91.84</b>  | <b>99.80</b>                                  | <b>99.80</b>                        |

The Commission approves the revised O&M expenses at Rs. 99.80 Cr for Review of FY 2014-15.

## 7.9 Gross Fixed Assets and Depreciation

### Gross Fixed Assets (GFA)

#### **Petitioner's submission**

The Petitioner has submitted that the Opening Balance of assets FY 2014-15 comes to around Rs. 563.59 Cr. The additions to GFA are estimated to be around Rs. 48.00 Cr and the Petitioner has requested the Commission to approve the closing asset value of Rs. 611.59 Cr. for FY 2014-15 as detailed in the table below:

**Table 7.16: Gross Fixed Assets Submitted by the Petitioner for Review of FY 2014-15**

| (Rs. Cr)   |   |   |
|--|---|---|
| Particulars  | Approved by Commission in TO dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner |
| Opening Value of Assets at the beginning of the year | 555.84  | 563.59  |
| Additions during the year                            | 48.00   | 48.00   |
| Value of Assets sold/ disposed off                   | -   | -   |
| <b>Gross Fixed Assets at the end of the year</b>     | <b>603.84</b>   | <b>611.59</b>                                 |

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

Gross Fixed Assets submitted by the Petitioners are approved, as detailed in the Table below:

**Table 7.17: Gross Fixed Assets approved by the Commission for Review of FY 2014-15**

| (Rs. Cr)   |   |   |                                     |
|--|---|---|-------------------------------------|
| Particulars  | Approved by Commission in TO dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner | Approved by the Commission (Review) |
| Opening Value of Assets at the beginning of the year | 555.84  | 563.59  | 563.59                              |
| Additions during the year                            | 48.00   | 48.00   | 48.00                               |
| Value of Assets sold/ disposed off                   | -   | -   | -                                   |
| <b>Gross Fixed Assets at the end of the year</b>     | <b>603.84</b>   | <b>611.59</b>                                 | <b>611.59</b>                       |

### **Depreciation**

#### **Petitioner's Submission**

Depreciation has to be calculated as per Regulation 26 of JERC Tariff Regulations, 2009. The Petitioner has submitted that the depreciation of Rs. 30.86 Cr has been arrived at for the year FY 2014-15 as per CERC Regulations as detailed in the table below:

**Table 7.18: Depreciation submitted by the Petitioner for Review of FY 2014-15**

| (Rs. Cr)   |   |   |
|--|---|---|
| Particulars  | Approved by Commission in TO dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner |
| Opening Value of Assets at the Beginning of the year | 555.84  | 563.59  |
| Additions During the year                            | 48.00   | 48.00   |
| Gross Fixed Assets at the end of the year            | 603.84  | 611.59  |
| <b>Depreciation</b>                                  | <b>26.45</b>  | <b>30.86</b>                                  |

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

The Commission has considered the submission of the Petitioner as reasonable and approves the same for FY 2014-15. However, the same would be subject to final adjustment at the time of True up, based on Audited Accounts.

The Depreciation approved by the Commission is given in the Table below:

Table 7.19: Depreciation Approved by the Commission for Review of FY 2014-15

(Rs. Cr)

| Particulars  | Approved by Commission in TO dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner | Approved by the Commission (Review) |
|--|---|---|-------------------------------------|
| Opening Value of Assets at the beginning of the year | 555.84  | 563.59  | 563.59                              |
| Additions during the year                            | 48.00   | 48.00   | 48.00                               |
| Gross Fixed Assets at the end of the year            | 603.84  | 611.59  | 611.59                              |
| <b>Depreciation</b>                                  | <b>26.45</b>  | <b>30.86</b>                                  | <b>30.86</b>                        |

### 7.10 Interest and Finance Charges

#### Petitioner's Submission

The Petitioner has submitted that Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 provides for Interest and Finance Charges on loan. EDP has submitted that the majority of capital assets are created out of the equity contribution from the Government of Puducherry and the actual borrowing of loan is only to the extent provided in the APDRP Scheme. The interest and finance charges, as per Revised Estimates for FY 2014-15, are Rs.19.38 Cr. The summary of interest and finance charges, as claimed by the Petitioner, and those approved by the Commission for FY 2014-15, along with revised estimate for FY 2014-15, is given in the Table below:

Table 7.20: Interest &amp; Finance Charges for FY 2014-15

(Rs. Cr)

| Sl. No. | Particulars                                 | Approved in TO dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner |
|---------|---|---|---|
| 1       | Opening Normative Loan                      | 85.50   | 94.27   |
| 2       | Add: Normative Loan during the Year         | 33.60   | 33.60   |
| 3       | Less: Normative Repayment                   | 10.57   | 9.43  |
| 4       | <b>Closing Normative Loan</b>               | 108.53  | 118.44  |
| 5       | Average Normative Loan                      | <b>97.02</b>                                      | <b>106.36</b>                                 |
| 6       | Rate of Interest (@SBAR rate)               | 14.75%  | 14.75%  |
| 7       | <b>Interest on Normative Loan</b>           | <b>14.31</b>                                      | <b>15.69</b>                                  |
| 8       | Other Finance Charges                       | 1.32  | 3.69  |
| 9       | <b>Total Interest &amp; Finance Charges</b> | <b>15.63</b>                                      | <b>19.38</b>                                  |

### Commission's Analysis

The Petitioner has claimed the interest and finance charges as per Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The Commission has considered the normative loan at 70 % on addition to Gross Fixed Assets of Rs. 48.00 Cr during FY 2014-15.

The Commission has considered Rs.3.69 Cr. towards bank charges and other finance charges as projected by the Petitioner in addition to the interest charges for FY 2014-15 in review. The Commission approved the interest and finance charges for FY 2014-15, as given in Table below:

**Table 7.21: Interest Approved by the Commission for FY 2014-15**

| (Rs. Cr) |   |                                     |
|----------|---|-------------------------------------|
| Sl. No   | Particulars                                 | Approved by the Commission (Review) |
| 1        | Opening Normative Loan                      | 94.27                               |
| 2        | Add: Normative Loan during the Year         | 33.60                               |
| 3        | Less: Normative Repayment                   | 9.43                                |
| 4        | <b>Closing Normative Loan</b>               | 118.44                              |
| 5        | Average Normative Loan                      | <b>106.36</b>                       |
| 6        | Rate of Interest (@SBAR rate)               | 14.75%                              |
| 7        | <b>Interest on Normative Loan</b>           | <b>15.69</b>                        |
| 8        | Other Finance Charges                       | 3.69                                |
| 9        | <b>Total Interest &amp; Finance Charges</b> | <b>19.38</b>                        |

The Commission approves the revised interest and finance charges at Rs. 19.38 Cr for Review of FY 2014-15.

### 7.11 Interest on Working Capital

#### Petitioner's Submission

Regulation No.29 of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009, stipulates the procedure for calculation of Working Capital and Interest on Working Capital, as shown below:

" ....

- (1) For generation and transmission business, the working capital shall be as per CERC norms.
- (2) Subject to prudence check, the working capital for the distribution business shall be the sum of one month's requirement for meeting:
  - (a) Power Purchase Cost,

- (b) Employee Cost,*
- (c) Administration & General Expenses, and*
- (d) Repair & Maintenance Expenses.*

*(3) Subject to prudence check, the working capital for an integrated utility shall be the sum of one month's requirement for meeting:*

- (a) Power Purchase Cost*
- (b) Employee Cost*
- (c) Administration & General Expenses*
- (d) Repair & Maintenance expenses.*
- (e) Sum of two months' requirements for meeting the Fuel Cost.*

*(4) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of the State Bank of India on 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis, not with standing that the generating company/licensee has not taken working capital loan from any out side agency or has exceeded the working capital loan amount worked out on the normative figures....."*

The Petitioner here by submits that it has adopted the same methodology adopted by the Commission in its Tariff Order for FY 2013-14 for arriving at the working capital requirement, whereby it has excluded the security deposits available with the Petitioner from the working capital requirement, though the same has not been specified in the Regulations.

The Petitioner has submitted that the Commission has approved 'NIL' interest on working capital for FY 2014-15. Further it was submitted that based on the revised estimates the interest on working capital comes to 'NIL' for FY 2014-15 and accordingly no Interest on Working Capital is claimed for FY 2014-15.

### **Commission's Analysis**

The Petitioner has claimed the working capital in accordance with Regulation 29 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 taking into consideration the security deposit available. The interest on working capital approved by the Commission for FY 2014-15 is NIL. In the revised estimates, this figure comes to NIL.

The Commission considers and approves the Interest on Working Capital as NIL in review for FY 2014-15.

**Table 7.22: Interest on Working Capital Approved for FY 2014-15**

| (Rs. Cr) |   |   |   |                                     |
|----------|---|---|---|-------------------------------------|
| Sl. No.  | Particulars                                 | Approved by Commission in TO dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner | Approved by the Commission (Review) |
| 1        | Power Purchase Cost - 1 Month               | 80.21   | 81.12   | 80.32                               |
| 2        | Employee Cost - 1 Month                     | 5.71  | 6.28  | 6.28                                |
| 3        | Administration & General Expenses - 1 Month | 0.35  | 0.45  | 0.45                                |
| 4        | R&M Cost - 1 Month                          | 1.59  | 1.59  | 1.59                                |
| 5        | Less: Security Deposit Opening Bal.         | 127.38  | 123.48  | 123.48                              |
| <b>6</b> | <b>Total</b>                                | <b>(39.51)</b>  | <b>(34.04)</b>                                | <b>(34.84)</b>                      |
| 7        | Interest Rate                               | 14.75%  | 14.75%  | 14.75%                              |
| <b>8</b> | <b>Interest on Working Capital</b>          | <b>--</b>   | <b>--</b>                                     | <b>--</b>                           |

## 7.12 Interest on Security Deposit

### Petitioner's Submission

The Petitioner has submitted that Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, provides for payment of Interest on Security Deposit. The Petitioner has adopted the Bank rate at 9%, as notified by Reserve Bank of India. The Interest on security deposit worked out is given in the Table below:

**Table 7.23: Interest on Security Deposit for FY 2014-15 (Rs. Cr.)**

| Sl. No. | Particulars   | Approved in T.O. dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner |
|---------|---|---|---|
| 1       | Opening Security Deposit  | 95.89   | 123.48  |
| 2       | Add: Deposits during the Year                                       | 27.66   | 27.58   |
| 3       | Less: Deposits refunded   |   | =   |
| 4       | Less: Deposits in form of BG/FDR                                    |   |   |
| 5       | <b>Closing Security Deposit</b>                                     | <b>123.55</b>                                       | <b>151.06</b>                                 |
| 6       | <b>Bank Rate</b>  | <b>8.75%</b>  | <b>9.00%</b>                                  |
| 7       | <b>Interest on Security Deposit</b>                                 | <b>9.60</b>   | <b>12.35</b>                                  |
| 8       | Interest on Security Deposit estimated to be paid                   |   | <b>4.00</b>                                   |
| 9       | <b>Interest on Security Deposit to be provisioned in FY 2015-16</b> |   | <b>8.35</b>                                   |

**Commission's Analysis**

The Commission considers the interest on average security deposit of Rs. 137.27 Cr at the Bank Rate of 9% and approved Rs.12.35 Cr. However, the Commission approves Rs.4.00 Cr. to be recovered as part of ARR for review of FY 2014-15, as submitted by the Petitioner and allow to carry forward the balance of Rs.8.35 Cr. to be provisioned in FY 2015-16 as given in the Table below:

**Table 7.24: Interest on Security Deposit approved for Review of FY 2014-15 (Rs. Cr)**

| Sl. No. | Particulars  | Approved in T.O. dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner | Approved by the Commission (Review) |
|---------|--|---|---|-------------------------------------|
| 1       | Opening Security Deposit                                     | 95.89   | 123.48  | 123.48                              |
| 2       | Add: Deposits during the Year                                | 27.66   | 27.58   | 27.58                               |
| 3       | Less: Deposits refunded                                      |   | -   | -                                   |
| 4       | Less: Deposits in form of BG/FDR                             |   |   |                                     |
| 5       | <b>Closing Security Deposit</b>                              | <b>123.55</b>                                       | <b>151.06</b>                                 | <b>151.06</b>                       |
| 6       | <b>Bank Rate</b>   | 8.75%   | 9.00%   | 9.00%                               |
| 7       | <b>Interest on Security Deposit</b>                          | <b>9.60</b>   | <b>12.35</b>                                  | <b>12.35</b>                        |
| 8       | Interest on Security Deposit estimated to be paid            |   | <b>4.00</b>                                   | <b>4.00</b>                         |
| 9       | <b>Interest on Security Deposit to be provisioned in MYT</b> |   | <b>8.35</b>                                   | <b>8.35</b>                         |

The Commission observes that strict directions were given to fulfil the obligation of payment of interest on security deposit received from the consumers during 2009-10, 2010-11 and 2011-12. In the interest of the stakeholders, the Commission approved a provision of Rs.9.78 Cr. in the ARR of FY 2014-15 towards interest on security deposit covering FY 2009-10 to FY 2011-12 subject to adjustment during the true up/review of FY 2014-15. The Petitioner submits that only Rs.4 Cr. (approximately) is estimated to be paid to the consumers in FY 2014-15, requesting the Commission to allow the balance provisions to be carried forward to be recovered in the MYT control period from FY 2015-16 to FY 2017-18.

The status of provision of interest on security deposit is given below in the Table.

Table 7.25: Status of provision of interest on security deposit (Rs. Cr.)

| Financial Year          | Approved by the Commission |                  | Revised estimates (Petitioner submission) |  |
|-------------------------|----------------------------|------------------|---|--|
|                         | Tariff Order reference     | Amount (Rs. Cr.) | Amount (Rs. Cr.)                          | Remarks                                  |
| 2009-10                 | Dt.25.04.2014              | 2.99             | 2.99                                      | Actuals as per audited accounts          |
| 2010-11                 | Dt.25.04.2014              | 3.18             | 3.18                                      | Actuals as per audited accounts          |
| 2011-12                 | Dt.25.04.2014              | 3.61             | 4.12                                      | Actuals as per audited accounts          |
| 2012-13                 | Dt.10.04.2013              | 12.67            | 8.02                                      | Actuals as per audited accounts          |
| 2013-14                 | Dt.25.04.2014              | 7.18             | 9.32                                      | Provisional actuals (unaudited accounts) |
| 2014-15                 | Dt.25.04.2014              | 9.60             | 12.35                                     | Revised estimates                        |
| <b>Total provisions</b> |                            | <b>39.23</b>     | <b>39.98</b>                              |  |

It may be seen from the above Table, as against the provision of Rs.39.98 Cr. (revised estimates), PED is making a very small provision of only Rs.4 Cr. in the ARR of FY 2014-15. The Commission gives strict instructions for the immediate payment of interest on security deposit received from the consumers.

### 7.13 Provision for Bad Debts

#### Petitioner's submission

The Petitioner has submitted that it is in the process of reconciling the list of arrears with the sundry debtors' balances as per financial statements, and that it is not claiming any provision for bad and doubtful debts in the ARR for FY 2014-15 for pass-through in the Tariff to the consumers.

#### Commission's Analysis

Since the Petitioner has submitted that it is in the process reconciling the list of arrears with sundry debtors balances as per financial statements, the Commission has not considered any expenses on account of bad and doubtful debts.

### 7.14 Return on Capital Base

#### Petitioner's submission

The Petitioner has submitted that Regulations 23(2) and 24 of JERC Tariff Regulations, 2009, provide for entitlement for return on capital base/net fixed assets by licensee. In line with the Regulation and the methodology adopted by the Commission in its previous order, the PED has calculated the return on capital base at 3.00%. The summary of the return on capital base/Net Fixed Assets, as calculated by the licensee on the basis of revised estimates for FY 2014-15, is tabulated below:



Table 7.26: Return on Net Fixed Assets for FY 2014-15

| (Rs. Cr)                                  |                                  |   |
|---|----------------------------------|---|
| Particulars                               | Approved in T.O dated 25.04.2014 | Revised Estimates Submitted by the Petitioner |
| Gross Block at the Beginning of the year  | 555.84                           | 563.59  |
| Opening CWIP                              | 84.09                            | 102.99  |
| Less: Opening Debts                       | 27.78                            | 26.37   |
| Less: Accumulated Depreciation            | 278.74                           | 274.63  |
| Net Fixed Assets                          | 333.41                           | 365.58  |
| Less : Accumulated Consumer Contribution  | -                                | 9.92  |
| Net fixed assets at beginning of the year | <b>333.41</b>                    | <b>355.66</b>                                 |
| <b>Reasonable Return @ 3% of NFA</b>      | <b>10.00</b>                     | <b>10.67</b>                                  |

### Commission's Analysis

The EDP, being an integrated utility, is entitled to return on capital base/Net fixed Assets, as per Regulations 23 of JERC Tariff Regulations, 2009. The return on capital base as per provision of Regulation is as shown below:

Table 7.27: Return on Capital Base Approved by the Commission

| (Rs. Cr)                                  |                                  |   |                                     |
|---|----------------------------------|---|-------------------------------------|
| Particulars                               | Approved in T.O dated 25.04.2014 | Revised Estimates Submitted by the Petitioner | Approved by the Commission (Review) |
| Gross Block at the beginning of the year  | 555.84                           | 563.59  | 563.59                              |
| Opening CWIP                              | 84.09                            | 102.99  |                                     |
| Less: Opening Debts                       | 27.78                            | 26.37   |                                     |
| Less: Accumulated Depreciation            | 278.74                           | 274.63  | 274.63                              |
| Net Fixed Assets                          | 333.41                           | 365.58  | 288.96                              |
| Less: Accumulated Consumer Contribution   | -                                | 9.92  | 9.92                                |
| Net fixed assets at beginning of the year | <b>333.41</b>                    | <b>355.66</b>                                 | 279.04                              |
| <b>Reasonable Return @ 3% of NFA</b>      | <b>10.00</b>                     | <b>10.67</b>                                  | <b>8.37</b>                         |

## 7.15 Non Tariff Income

### Petitioner's Submission

The Non Tariff Income comprises of meter rent, late payment surcharges, Interest on Staff Loans, reconnection fees, miscellaneous revenue, etc.

**The outside sales/UI sales under the broad head of Non Tariff Income:** PED hereby submits that UI sales to the extent of 27.04 MU that would fetch an income of Rs. 1.27 Cr. UI sales during the second half have been considered as NIL since the

Power Purchase is on MoD basis. The summary of total Non Tariff Income is tabulated below:

**Table 7.28: Submitted Non Tariff Income for FY 2014-15**

(Rs. Cr)

| Particulars                         | Approved in the Tariff Order dated 25 <sup>th</sup> April, 2014 | Revised Estimates Submitted by the Petitioner |
|-------------------------------------|---|---|
| Revenue from outside sales/UI sales | NIL   | 1.27  |
| Non-Tariff Income                   | 0.50  | 3.61  |
| Total Non-Tariff Income             | 0.50  | 4.88  |

### Commission's Analysis

The Commission considers the Non-Tariff Income projected by the EDP at Rs. 4.88 Cr as reasonable and approves the same for Review of ARR for FY 2014-15.

**Table 7.29: Non Tariff Income approved for FY 2014-15**

(Rs. Cr.)

| Particulars                         | Approved in the Tariff Order dated 25 <sup>th</sup> April, 2014 | Revised estimates submitted by the Petitioner | Approved by Commission (Review) |
|-------------------------------------|---|---|---------------------------------|
| Revenue from outside sales/UI sales | NIL   | 1.27  | 1.27                            |
| Non-Tariff Income                   | 0.50  | 3.61  | 3.61                            |
| Total Non-Tariff Income             | 0.50  | 4.88  | 4.88                            |

## 7.16 Revenue from Sale of Power at Existing Tariff

### Petitioner's Submission

The Revenue from Tariff for FY 2014-15, approved by the Commission for FY 2014-15, was Rs. 1092.86 Cr. The Revenue from Tariff for FY 2014-15, as pre revised estimates, is Rs. 1253.20 Cr (including FPPCA and Rs. 110.50 Cr as 10% surcharge). The summary of revenue from Tariff, as claimed by the PED in the ARR for FY 2014-15, and that approved by the Commission as per revised estimates for FY 2014-15, is tabulated below:

Table 7.30: Submitted Revenue from Tariff for 2014-15

| Sl. No.     | Category of Consumer  | Sales<br>(MU)   | Revenue<br>(Rs. Cr.) |
|-------------|---|-----------------|----------------------|
|             |   | FY 2014-15      |                      |
| LT Category |   |                 |                      |
| 1           | Domestic & Cottage  | 691.94          | 167.45               |
| 2           | OHOB  | 12.00           | 1.07                 |
| 3           | Commercial  | 187.84          | 93.36                |
| 4           | Agriculture   | 57.00           | 1.81                 |
| 5           | Public lighting   | 26.00           | 14.43                |
| 6           | LT Industrial including Water Tanks   | 199.12          | 90.22                |
| 7           | Temporary supply - LT&HT  | 14.00           | 12.60                |
|             | <b>Total LT</b>   | <b>1,187.90</b> | <b>380.94</b>        |
| HT Category |   |                 |                      |
| 9           | HT 1 Industrial / Commercial  | 897.94          | 504.59               |
| 10          | HT 2 - Government & water tanks   | 59.60           | 34.66                |
| 11          | HT 3 – EHT  | 335.34          | 187.70               |
| 12          | <b>Total HT</b>   | <b>1,292.88</b> | <b>726.95</b>        |
| 13          | Total from HT & LT  | <b>2,480.78</b> | <b>1,107.89</b>      |
| 14          | FPPCA   |                 | <b>34.83</b>         |
| 15          | 10% Surcharge   |                 | 110.50               |
| 16          | <b>Total</b>  | <b>2,480.78</b> | <b>1,253.22</b>      |
|             | As Claimed by Petitioner in the last Tariff Order (including Surcharge)               | 2,524.70        | 1,188.67             |
|             | As approved in the Tariff Order dt. 25 <sup>th</sup> April 2014 (including Surcharge) | 2,502.09        | 1,247.78             |

The Petitioner has requested the Commission to allow revenue of Rs. 1253.20 Cr (including FPPCA and 10% surcharge)

#### Commission's Analysis

The Commission considers and accepts the revenue of Rs. 1253.20 Cr (including FPPCA and 10% surcharge for FY 2014-15).

#### 7.17 Aggregate Revenue Requirement (ARR) for FY 2014-15

##### Petitioners' Submission

The Petitioner has submitted the Aggregate Revenue Requirement for FY 2014-15 under revised estimates for FY 2014-15, as shown below:

Table 7.31: ARR for FY2014-15 as submitted by the Petitioner

(Rs. Cr.)

| Particulars                                | Approved by Commission in T.O dated 25.04.2014 | Revised Estimates Submitted by the Petitioner |
|--|--|---|
| Cost of Power Purchase                     | 962.58   | 970.62  |
| Employee Cost                              | 68.53  | 75.32   |
| A&G Expenses                               | 4.19   | 5.36  |
| R&M Expenses                               | 19.12  | 19.12   |
| Depreciation                               | 26.45  | 30.86   |
| Interest & Finance Charges                 | 25.23  | 19.38   |
| Interest working capital                   | --   | --  |
| Interest on Security Deposit               | --   | --  |
| Provision for Bad Debts                    | --   | --  |
| Return @ 3 % of NFA                        | 10.00  | 10.67   |
| Provision for Interest on Security Deposit | 9.78   | 4.00  |
| <b>Sub-total</b>                           | <b>1125.89</b>                                 | <b>1135.33</b>                                |
| Less: Non-Tariff Income                    | 0.50   | 4.88  |
| <b>Aggregate Revenue Requirement</b>       | <b>1125.39</b>                                 | <b>1130.45</b>                                |

**Commission's Analysis**

Based on the items of expenditure discussed in the preceding sections, the Commission approves the Aggregate Revenue Requirement for FY 2014-15 at Rs.1121.37 Crore, as summarised in the Table below:

Table 7.32: ARR for FY 2014-15 (RE) approved by the Commission

(Rs. Cr.)

| Particulars                          | Approved by Commission in T.O dated 25.04.2014 | Revised Estimates Submitted by the Petitioner | Approved by the Commission (Review) |
|--------------------------------------|--|---|-------------------------------------|
| Cost of Power Purchase               | 938.48   | 953.65  | 948.58                              |
| RPO obligation                       | 24.10  | 16.97   | 15.26                               |
| Employee Cost                        | 68.53  | 75.32   | 75.32                               |
| A&G Expenses                         | 4.19   | 5.36  | 5.36                                |
| R&M Expenses                         | 19.12  | 19.12   | 19.12                               |
| Depreciation                         | 26.45  | 30.86   | 30.86                               |
| Interest & Finance Charges           | 25.23  | 19.38   | 19.38                               |
| Interest working capital             | --   | --  | --                                  |
| Interest on Security Deposit         | 9.78   | 4.00  | 4.00                                |
| Provision for Bad Debts              | --   | --  | --                                  |
| Return @ 3 % of NFA                  | 10.00  | 10.67   | 8.37                                |
| <b>Sub-total</b>                     | <b>1125.89</b>                                 | <b>1135.33</b>                                | <b>1126.25</b>                      |
| Less: Non-Tariff Income              | 0.50   | 4.88  | 4.88                                |
| <b>Aggregate Revenue Requirement</b> | <b>1125.39</b>                                 | <b>1130.45</b>                                | <b>1121.37</b>                      |

**7.18 Revenue Gap**

The Petitioner has submitted the revised estimates for revenue surplus of Rs.9.45 Cr. for approval. The Commission, based on the ARR and revenue from Tariff (excluding surcharge) as approved in the preceding paragraphs, approved the revenue surplus of Rs.21.90 Crore for Review of FY 2014-15 as shown in the Table below:

**Table 7.33: Revenue Gap for FY 2014-15 (RE)**

| Particulars                           | Approved by Commission in T.O dated 25.04.2014 | Revised Estimates Submitted by the Petitioner | (Rs. Crore)                         |
|---------------------------------------|--|---|-------------------------------------|
|                                       |  |   | Approved by the Commission (Review) |
| Aggregate Revenue Requirement         | 1125.39  | 1130.45                                       | 1121.37                             |
| Revenue from Tariff (Excl. Surcharge) | 1134.59  | 1142.70                                       | 1142.70                             |
| Revenue Gap/ (Surplus)                | (9.20)   | (12.25)                                       | (21.33)                             |

**7.19 Recovery of Regulatory Asset:**

The Commission has earlier created a Regulatory Asset while issuing the Tariff Order dated 12.06.2012 to cover the revenue gap of Rs.320.56 Crore arrived at for FY 2009-10, FY 2010-11, FY 2011-12 and FY 2012-13. The Regulatory Asset, as per the JERC Tariff Regulations, 2009, had to be amortised over a period of three years starting from FY 2013-14.

Subsequently, in the Tariff Order dated 10<sup>th</sup> April 2013, the Commission considered

- (i) True-up for FY 2009-10 and FY 2010-11 based on the audited accounts submitted by ED-P;
- (ii) Provisional true up for FY 2011-12 based on actual unaudited figures;
- (iii) Review of FY 2012-13 based on revised estimates submitted by ED-P; and
- (iv) Petition for determination of tariff for FY 2013-14 based on projections/ estimates.

The Revenue Gap figure was revised upwards to Rs.680.84 Cr. in the Tariff Order dated 10<sup>th</sup> April 2013. The Commission while retaining the Regulatory Asset figure of Rs.320.56 Cr. as created in the Tariff Order dated 12.06.2012, advised the Petitioner to approach the Government of Puducherry to avail one time support for the balance figure of Revenue gap viz. Rs.360.28 Crore. The Commission also approved a surcharge of 10% on the billed amount to all consumers over and above the tariff

excluding Agriculture and one Hut one Bulb (OHOB) consumers. This surcharge was approved to be levied for a period of three years to liquidate the Regulatory Asset. The ED-P has billed the surcharge in FY 2013-14 and FY 2014-15 and the status of the Regulatory Asset as at the end of FY 2014-15 as estimated is given in the Table below:

**Table 7.34: Status of Regulatory Asset as at the end of FY 2014-15 (Estimated) (Rs. Cr.)**

| Particulars   | Approved by the Commission | Revised by the Petitioner in MYT petition | Approved by the Commission now | Remarks  |
|---|----------------------------|---|--------------------------------|--|
| Revenue Gap for   |                            |   |                                |  |
| FY 2009-10  | 59.54 *                    | 59.54                                     | 58.02 <sup>#</sup>             | <b>*See Note1<br/># See Note 2</b>   |
| FY 2010-11  | 96.19 *                    | 96.19                                     | 93.94 <sup>#</sup>             |  |
| FY 2011-12  | 346.01 *                   | 352.18                                    | 348.96 <sup>#</sup>            |  |
| FY 2012-13  | 179.10 *                   | 125.57                                    | 107.54 <sup>#</sup>            |  |
| <b>Total Revenue Gap</b>  | <b>680.84</b>              | <b>633.48</b>                             | <b>608.46</b>                  |  |
| <b>Less: Government support</b>   | <b>360.28</b>              | <b>360.28</b>                             | <b>360.28</b>                  |  |
| <b>Regulatory Asset (A)</b>   | <b>320.56</b>              | <b>273.20</b>                             | <b>248.18</b>                  |  |
| Recovery of Regulatory Asset from consumers through surcharge           |                            |   |                                | <b>@ as approved by the Commission in the Tariff Order dated 25th April 2014</b> |
| FY 2013-14  | 104.36 <sup>@</sup>        | 101.76                                    | 104.36 <sup>**</sup>           |  |
| FY 2014-15  | 113.19 <sup>@</sup>        | 110.50                                    | 110.50                         |  |
| <b>Total recovery of Regulatory Asset (B)</b>                           | <b>217.55</b>              | <b>212.26</b>                             | <b>214.86</b>                  |  |
| <b>Balance Regulatory Asset to be recovered in FY 2015-16 (A) - (B)</b> | <b>103.01</b>              | <b>60.94</b>                              | <b>33.32</b>                   |  |

**\*\*** In the absence of audited accounts submitted by ED-P for FY 2013-14, the earlier approved figure of Rs.104.36 Cr. as in T.O dated 25.04.2014 is considered.

Note 1: \*as approved by the Commission initially in the Tariff Order dated 10<sup>th</sup> April, 2013.

Note 2: <sup>#</sup>as per the true-up approved by the Commission.

The estimated regulatory assets amount is subject to revision depending up on the outcome of the True-up of the past years viz. FY 2013-14 and FY 2014-15 during the next Tariff Order.

As elsewhere considered in this Tariff Order, the Commission observes that in the computation of the Return on Capital Base as per the earlier Tariff Orders, the Commission has inadvertently included the “Opening CWIP” and “Opening Debt” figures. The figures in respect of FY 2011-12 and FY 2012-13 have already been corrected in the relevant portions of this Tariff Order with consequential changes in

the ARR and Revenue Gap. The same exercise was done for FY 2009-10 and FY 2010-11.

The corrected and the earlier figures are given below:

| <b>Particulars</b>                                 | <b>FY 2009-10</b> | <b>FY 2010-11</b> |
|--|-------------------|-------------------|
| - Corrected Return on Capital Base                 | 6.86              | 6.88              |
| - Approved earlier in the respective Tariff Orders | 8.38              | 8.85              |
| - Difference                                       | (1.52)            | (1.97)            |
| - Difference in carrying cost                      |                   | (0.09)            |
| - Revised Revenue Gap now considered               | 58.02             | 93.94             |

## 8. Annual Revenue Requirement (ARR) for FY 2015-16

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### 8.1 Introduction

The ARR & Tariff petition has been filed by the Electricity department, Puducherry for the MYT Period FY 2015-16 to FY 2017-18 in accordance with the relevant provisions of the MYT Tariff Regulations, 2014.

As discussed in para 3.3, the Commission has taken a decision to determine the ARR for FY 2015-16 only instead of MYT period of FY 2015-16 to FY 2017-18 and determine the tariff FY 2015-16 considering the various provisions of the JERC Tariff Regulations. Accordingly, the figures projected for FY 2015-16 only are considered in this chapter.

The Joint Electricity Regulatory Commission has notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Terms and Conditions for determination of Tariff) Regulations, 2009. As per the same, the Commission shall determine the Annual Revenue Requirement and tariff for the distribution business of electricity.

#### 8.1.1 Submission by Electricity Department, Puducherry

In accordance with the above provisions, the Electricity Department, Government of Puducherry (PED) has submitted the petition for Annual Revenue Requirement and determination of Tariff for FY 2015-16.

### 8.2 Category-wise Energy Sales projections:

Proper estimation of category-wise energy sales for the year is essential to arrive at the quantum of power purchase and the likely revenue by sale of energy. This Section will examine in detail the consumer category-wise energy sales projected by PED for the FY 2015-16 for approval of ARR.

#### Petitioner's Submission:

The Petitioner has furnished the actuals of category-wise number of consumers and energy sales for the years FY 2010-11 to FY 2013-14, as given in the Table below:



**Table 8.1: Category-wise Number of Consumers (Actuals) for the Period FY 2010-11 to FY 2012-13**

**(No's)**

| <b>Sl. No.</b> | <b>Category</b>               | <b>FY 2010-11</b> | <b>FY 2011-12</b> | <b>FY 2012-13</b> | <b>CAGR (%) considered</b> |
|----------------|-------------------------------|-------------------|-------------------|-------------------|----------------------------|
| 1              | Domestic                      | 236881            | 246437            | 258252            | 4.41%                      |
| 2              | Hut services                  | 38966             | 35466             | 35490             | 0.00%                      |
| 3              | Commercial                    | 40531             | 41943             | 43479             | 3.57%                      |
| 4              | Agriculture (HP)              | 6810              | 6828              | 6859              | 0.00%                      |
| 5              | Street Lighting               | 48167             | 48384             | 48485             | 0.33%                      |
| 6              | LT Industrial                 | 5897              | 5955              | 6057              | 3.00%                      |
| 7              | Water Tanks                   | 58                | 80                | 85                | 3.00%                      |
| 8              | Temporary supply              | 0                 | 0                 | -                 | -                          |
| 9              | HT Industrial (HT-1)          | 394               | 401               | 419               | 3.12%                      |
| 10             | HT Govt. Establishment (HT-2) | 41                | 43                | 45                | 4.76%                      |
| 11             | EHT Industrial (HT-3)         | 7                 | 7                 | 7                 | 0.00%                      |
|                | <b>Total</b>                  | <b>377752</b>     | <b>385544</b>     | <b>399178</b>     |                            |

**Table 8.2: Category-wise sales (Actuals) for the Period FY 2010-11 to FY 2012-13**

**(MU)**

| <b>Sl. No.</b> | <b>Category</b>               | <b>FY 2010-11</b> | <b>FY 2011-12</b> | <b>FY 2012-13</b> | <b>CAGR (%) Considered</b> |
|----------------|-------------------------------|-------------------|-------------------|-------------------|----------------------------|
| 1              | Domestic                      | 508               | 537               | 581               | 6.92%                      |
| 2              | Hut services                  | 10                | 10                | 10                | 0.00%                      |
| 3              | Commercial                    | 156               | 168               | 182               | 8.00%                      |
| 4              | Agriculture (HP)              | 77                | 57                | 57                | 0.00%                      |
| 5              | Street Lighting               | 22                | 24                | 28                | 5.00%                      |
| 6              | LT Industrial                 | 115               | 133               | 142               | 7.00%                      |
| 7              | Water Tanks                   | 35                | 51                | 55                | 5.00%                      |
| 8              | Temporary supply              | 8                 | 14                | 20                | 0.00%                      |
| 9              | HT Industrial (HT-1)          | 1006              | 975               | 1015              | 7.00%                      |
| 10             | HT Govt. Establishment (HT-2) | 35                | 45                | 46                | 6.00%                      |
| 11             | EHT Industrial (HT-3)         | 237               | 308               | 339               | 6.00%                      |
|                | <b>TOTAL</b>                  | <b>2209</b>       | <b>2322</b>       | <b>2475</b>       |                            |

It is submitted by the Petitioner that the audited books of account for FY 2013-14 is in the process of preparation and hence, the corresponding sales and consumers figures pertaining to audited figures of FY 2010-11, FY 2011-12 and FY 2012-13 have been used for projection of FY 2015-16.

The Petitioner submitted that based on the assumptions of growth rate shown in the above tables, the projection for the sales, number of consumers for FY 2015-16 is considered as shown below:

**Table 8.3: Number of consumers and sales projected by the Petitioner for FY 2015-16**

| Sl. No. | Category                      | Consumers (No's) | Sales (MU)     |
|---------|-------------------------------|------------------|----------------|
| 1       | Domestic                      | 294202           | 652.84         |
| 2       | Hut services                  | 35539            | 10.00          |
| 3       | Commercial                    | 48173            | 193.70         |
| 4       | Agriculture (HP)              | 6836             | 56.63          |
| 5       | Street Lighting               | 50055            | 30.61          |
| 6       | LT Industrial                 | 6504             | 235.98         |
| 7       | Water Tanks                   | 113              | 53.55          |
| 8       | Temporary supply              | -                | 21.00          |
| 9       | HT Industrial (HT-1)          | 428              | 994.33         |
| 10      | HT Govt. Establishment (HT-2) | 53               | 53.00          |
| 11      | EHT Industrial (HT-3)         | 7                | 366.30         |
|         | <b>Total</b>                  | <b>441910</b>    | <b>2667.94</b> |

### **Commission's Analysis**

The PED has considered the two year CAGR from FY 2010-11 to FY 2012-13 for projecting the sales for FY 2015-16.

Since the actual sales are available for FY 2013-14 (though not audited), the Commission considers that it is appropriate to take into consideration the actual sales of FY 2013-14 also to arrive at the three year and two year CAGRs, to consider the projections.

The Commission has considered the three year CAGR from FY 2010-11 to FY 2013-14 and two year CAGR from FY 2010-11 to FY 2012-13 and also the two year CAGR from FY 2011-12 to FY 2013-14, as given in the Table below:

**Table 8.4: Category wise Growth rate considered for sales from FY 2010-11 to FY 2013-14**

| Sl. No. | Category   | Sales          |                |                |                | CAGR                                 |                                      |                                      |                              |
|---------|--|----------------|----------------|----------------|----------------|--------------------------------------|--------------------------------------|--------------------------------------|------------------------------|
|         |  | FY 2010-11     | FY 2011-12     | FY 2012-13     | FY 2013-14*    | 3 years for FY 2010-11 to FY 2013-14 | 2 years for FY 2010-11 to FY 2012-13 | 2 years for FY 2011-12 to FY 2013-14 | YoY FY 2012-13 to FY 2013-14 |
|         |  | (in MU)        |                |                |                | (%)                                  |                                      |                                      |                              |
| 1       | Domestic including Hut Services                        | 518.50         | 547.20         | 591.11         | 612.09         | 5.69                                 | 6.77                                 | 5.76                                 | 3.55                         |
| 2       | Commercial   | 156.30         | 167.70         | 182.30         | 181.00         | 5.08                                 | 8.10                                 | 3.89                                 | (0.71)                       |
| 3       | Agriculture (HP)                                       | 76.70          | 56.60          | 56.80          | 57.00          | (9.42)                               | (13.94)                              | 0.35                                 | 0.35                         |
| 4       | Street Lighting  | 22.10          | 240.00         | 27.90          | 26.00          | 5.57                                 | 12.36                                | 4.08                                 | (6.81)                       |
| 5       | LT Industrial  | 114.70         | 133.60         | 142.53         | 226.10         | 25.39                                | 11.47                                | 30.09                                | 58.63                        |
| 6       | Water Tanks  | 35.00          | 50.80          | 54.71          | 0.00           | (100.00)                             | 25.03                                | (100.00)                             | (100.00)                     |
| 7       | Temporary Supply                                       | 7.90           | 13.70          | 20.27          | 10.10          | 8.53                                 | 60.18                                | (14.14)                              | (50.17)                      |
| 8       | HT Industrial (kVA) (HT-1)                             | 1005.70        | 974.50         | 1015.38        | 878.01         | (4.43)                               | 0.48                                 | -5.08                                | (13.53)                      |
| 9       | HT State and Central Govt. Establishments (KVA) (HT-2) | 34.90          | 45.02          | 45.48          | 48.77          | 11.80                                | 14.16                                | 4.08                                 | 7.23                         |
| 10      | HT Industrial Extra High Tension (kVA) (HT-3)          | 237.40         | 307.80         | 338.50         | 326.65         | 11.22                                | 19.41                                | 3.02                                 | (3.50)                       |
|         | <b>Total</b>   | <b>2209.00</b> | <b>2321.00</b> | <b>2475.00</b> | <b>2366.00</b> | <b>2.31</b>                          | <b>5.85</b>                          | <b>0.96</b>                          | <b>(4.41)</b>                |

\* Taken from True up petition of FY 2013-14 submitted by the petitioner

### 8.3 Detailed Analysis of Energy Sales Projected:

The Petitioner's submission and the Commission's analysis for each category of consumers are discussed below:

The Petitioner has projected the sales for the FY 2015-16 by applying the growth rate over the approved sales of FY 2014-15. The Commission considers it appropriate to arrive at the sales for the FY 2015-16 by applying the growth rate over the actual sales of FY 2013-14.

The percentage contribution of sales by each category on the total sales during FY 2013-14 is shown below:

| S. No. | Category                          | Sale   | Percentage |
|--------|-----------------------------------|--------|------------|
| 1      | Domestic (including Hut Services) | 612.00 | 25.87      |
| 2      | Commercial                        | 181.00 | 7.65       |
| 3      | Agriculture                       | 57.00  | 2.41       |
| 4      | Street Lighting                   | 26.00  | 1.10       |

| S. No. | Category                | Sale           | Percentage |
|--------|-------------------------|----------------|------------|
| 5      | LT Industrial           | 226.00         | 9.55       |
| 6      | Temporary Supply        | 10.00          | 0.42       |
| 7      | HT Industrial           | 878.00         | 37.11      |
| 8      | HT Govt. Establishments | 49.00          | 2.07       |
| 9      | HT EHT Industrial       | 327.00         | 13.82      |
|        | <b>Total</b>            | <b>2366.00</b> | 100.00     |

**Domestic Consumers:**

**Petitioner's Submission:**

The Petitioner has projected the sales in domestic category for FY 2015-16 at a growth rate of 6.92% as discussed earlier. The projected sales for FY 2015-16 are shown in the Table below:

**Table 8.5: Energy Sales Projected for the Domestic Category for FY 2015-16**

| Category                     | FY 2014-15 (Approved) | FY 2015-16 (Projected) |
|------------------------------|-----------------------|------------------------|
| Domestic<br>(Excluding OHOB) | 610.6                 | 652.8                  |

(MU)

**Commission's Analysis:**

The sales to this category constitute 25.87% of the total sales.

The three year CAGR from FY 2010-11 to FY 2013-14 for this category works out to 5.69%, whereas the two year CAGR (FY 2010-11 TO FY 2012-13) is 6.77%. The two year CAGR from FY 2011-12 to FY 2013-14 works out to 5.76%. The growth rate (i.e., 6.77%) is considered reasonable, and considered to project the sales for FY 2015-16. The Commission approves the sales for the domestic category for the FY 2015-16, as given in the Table below:

**Table 8.6: Energy Sales Approved for the Domestic Category during the FY 2015 16**

| Category                | FY 2013-14<br>(Actuals)* | Growth rate<br>Adopted | FY 2015-16<br>(Projected) |
|-------------------------|--------------------------|------------------------|---------------------------|
| Domestic + Hut Services | 612.09                   | 6.77%                  | 697.00                    |

(MU)

\*Including Hut Services

**Commercial Consumers:**

**Petitioner's Submission:**

The Petitioner has projected the sales for FY 2015-16 considering the growth potential for Commercial activity in Puducherry and past trends. The energy

consumption is projected at a growth rate of 8% for FY 2015-16.

**Table 8.7: Energy Sales Projected for the Commercial Category for FY 2015-16**

| (MU)       |                      |                       |
|------------|----------------------|-----------------------|
| Category   | FY 2014-15(Approved) | FY 2015-16(Projected) |
| Commercial | 179.4                | 193.7                 |

**Commission's Analysis:**

The sales to this category constitute 7.65% of the total sales.

The three year CAGR from FY 2010-11 to FY 2013-14 for this category works out to 5.08%, whereas the two year CAGR is 8.1%. The Commission considers the growth rate of 8%, projected by the Petitioner, as reasonable, based on the potential for growth in commercial activity.

The Commission approves the sales for Commercial category for FY 2015-16 as given in the Table below:

**Table 8.8: Energy Sales Approved for the Commercial Category For FY 2015-16**

| (MU)       |                         |                        |                          |
|------------|-------------------------|------------------------|--------------------------|
| Category   | FY 2013-14<br>(Actuals) | Growth rate<br>Adopted | FY 2015-16<br>(Approved) |
| Commercial | 181                     | 8.00%                  | 211                      |

**Agriculture Consumers:**

**Petitioner's Submission:**

The Petitioner has submitted that it is expected that the consumption of this category will remain stagnant as it has remained in the past years. Therefore, the consumption and the number of consumers have been kept the same, as approved by the Commission in FY 2014-15 for FY 2015-16.

**Table 8.9: Energy sales Projected for the Agriculture Category for FY 2015-16**

| (MU)        |                      |                       |
|-------------|----------------------|-----------------------|
| Category    | FY 2014-15(Approved) | FY 2015-16(Projected) |
| Agriculture | 56.6                 | 56.6                  |

**Commission's Analysis:**

The sales to this category constitutes 2.33% of the total sales.

The Commission considers the 0% growth projected by PED for this category as reasonable.

The Commission approves the sales for agriculture for the FY 2015-16, as given in the Table below:

**Table 8.10: Energy Sales Approved for the Agriculture Category during the FY 2015-16**  
(MU)

| Category    | FY 2013-14<br>(Actuals) | Growth rate<br>Adopted | FY 2015-16 |
|-------------|-------------------------|------------------------|------------|
| Agriculture | 57                      | 0.00%                  | 57         |

**Street Lighting:**

**Petitioner's Submission:**

The Petitioner has considered the growth for public lighting (street light) at a rate of 5%.

**Table 8.11: Energy Sales Projected for the Street Lighting for FY 2015-16**  
(MU)

| Category        | FY 2014-15(Approved) | FY 2015-16(Projected) |
|-----------------|----------------------|-----------------------|
| Street Lighting | 29.2                 | 30.6                  |

**Commission's Analysis:**

The sales to this category constitute 1.10% of the total sales.

PED has projected a growth rate of 5% for this category. The 3 year CAGR from FY 2010-11 to FY 2013-14 for this category works out to 5.57%. The Commission considers the growth rate of 5%, as projected by PED is reasonable and considers the same.

The Commission approves the sales for street lighting for FY 2015-16, as given in the Table below:

**Table 8.12: Energy Sales Approved for the Street Lighting for FY 2015-16**  
(MU)

| Category        | FY 2013-14<br>(Actuals) | Growth rate<br>Adopted | FY 2015-16 |
|-----------------|-------------------------|------------------------|------------|
| Street Lighting | 26                      | 5.00%                  | 29         |

**LT Industrial and Water Tanks:****Petitioner's Submission:**

The Petitioner has considered that the LT industrial consumers are expected to grow at a rate of 7% and projected the sales for FY 2015-16 considering the same growth rate.

For water Tanks the growth rate of 5% is considered by the Petitioner for the sales for FY 2015-16.

**Table 8.13: Energy Sales Projected for the LT Industry and Water Tanks for FY 2015-16**

| (MU)          |                      |                       |
|---------------|----------------------|-----------------------|
| Category      | FY 2014-15(Approved) | FY 2015-16(Projected) |
| LT Industrial | 220.5                | 236                   |
| Water Tanks   | 51                   | 53.6                  |

**Commission's Analysis:**

The sales to this category constitute:

- (i) For LT Industrial - 8% of the total sales.
- (ii) For Water tanks - 2.08% of the total sales.

**LT Industrial:**

The Commission considers that the high growth of 25.39% recorded over the three years for FY 2010-11 to FY 2013-14 may not sustain. Hence a growth of 11.00% for this category for the FY 2015-16, in line with the two year CAGR is considered, since the actual consumption indicates signs of growth.

The Commission approves the sales for LT Industrial category for FY 2015-16, as given in the Table below:

**Table 8.14: Energy Sales Approved for the LT Industrial for FY 2015-16 (MU)**

| Category      | FY 2013-14<br>(Actuals) | Growth rate<br>Adopted | FY 2015-16 |
|---------------|-------------------------|------------------------|------------|
| LT Industrial | 226.1                   | 11.00%                 | 279        |

The sales for Water Tanks are considered separate as the sales for FY 2013-14 are stated to be 'NIL' and considered under LT Industrial.

**HT-1 (Industrial)****Petitioner's Submission:**

The Petitioner has considered a growth rate of 7% in case of consumption, against a CAGR of 0.48% in the last three audited years.

**Table 8.15: Energy Sales Projected for the HT-I Industrial Category for FY 2015-16**

| (MU)            |                      |                       |
|-----------------|----------------------|-----------------------|
| Particulars     | FY 2014-15(Approved) | FY 2015-16(Projected) |
| HT-I Industrial | 929.3                | 994.3                 |

**Commission's Analysis:**

The sales to this category constitute 37.11% of the total sales.

The PED Projected a growth rate of 7% for this category, as against the three year CAGR of -4.43% and two year CAGR of 0.48%, from FY 2010-11 to FY 2012-13. Considering the present economic situation and positive sentiment in the country, the Commission considers the 7% growth rate for this category for the FY 2015-16, as projected by PED is reasonable, though the three year and two year CAGRs up to FY 2013-14 are negative.

The Commission approves the sales for HT-1 Industrial for FY 2015-16, as given in the Table below:

**Table 8.16: Energy Sales Approved for the HT-I Industrial for FY 2015-16**

| (MU)            |                         |                        |            |
|-----------------|-------------------------|------------------------|------------|
| Category        | FY 2013-14<br>(Actuals) | Growth rate<br>Adopted | FY 2015-16 |
| HT-I Industrial | 878                     | 7%                     | 1005       |

**HT-2 (State and Central Govt. Establishments)****Petitioner's Submission:**

The Petitioner has considered a growth rate of 6% for this category of consumers.

**Table 8.17: Energy Sales Projected for HT-2 for FY 2015-16**

| (MU)  |                      |                       |
|---|----------------------|-----------------------|
| Category                                      | FY 2014-15(Approved) | FY 2015-16(Projected) |
| HT-2 (State and Central Govt. Establishments) | 50                   | 53                    |



**Commission's Analysis:**

The sales to this category constitute 1.92% of the total sales.

The PED projected a growth rate of 6% for this category against the two year CAGR of 4.08%. The sales of this category are only about 1.92% of the total sales. The growth rate, as projected by the PED, has been considered by the Commission.

The Commission approves the sales for HT-2 (State and Central Govt. Establishments) for FY 2015-16, as given in the Table below:

**Table 8.18: Energy Sales Approved for the HT-2 (State and Central Govt. Establishments) for FY 2015-16**

|   |                         |                        | (MU)       |
|---|-------------------------|------------------------|------------|
| Category                                      | FY 2013-14<br>(Actuals) | Growth rate<br>Adopted | FY 2015-16 |
| HT-2 (State and Central Govt. Establishments) | 49                      | 6.00%                  | 55         |

**HT-3 (Industrial Extra High Tension)****Petitioner's Submission:**

The Petitioner has submitted that the growth in consumption of this category is expected to grow at 6%, as against the CAGR of 19.41% (FY2010-11 to FY 2012-13).

**Table 8.19: Energy Sales Projected for the HT-3 for FY 2015-16**

|                                      |                      |                       | (MU) |
|--------------------------------------|----------------------|-----------------------|------|
| Category                             | FY 2014-15(Approved) | FY 2015-16(Projected) |      |
| HT-3 (Industrial Extra High Tension) | 345.6                | 366.3                 |      |

**Commission's Analysis:**

The sales to this category constitute 13.80% of the total sales.

The Petitioner has projected a growth rate of 6%, as against the three year CAGR of 11.22% and two year CAGR of 19.41%, up to FY 2012-13 and the two year CAGR up

to FY 2011-12 to FY 2013-14 have been, however, 3.02% and 0.16% respectively.

As in the case of H.T.I, taking into consideration the present economic situation and positive sentiment in the country, the Commission considers the growth rate of 6% for this category for the FY 2015-16, as projected by PED, by taking into account the decline in the growth during FY 2013-14 as reasonable.

The Commission approves the sales for HT-3 (Industrial Extra High Tension) for the FY 2015-16, as given in the Table below:

**Table 8.20: Energy Sales Approved for the HT-3 (Industrial Extra High Tension) for FY 2015-16**

| (MU)                                 |                         |                        |            |
|--------------------------------------|-------------------------|------------------------|------------|
| Category                             | FY 2013-14<br>(Actuals) | Growth rate<br>Adopted | FY 2015-16 |
| HT-3 (Industrial Extra High Tension) | 327                     | 6%                     | 367        |

**Temporary Supply:**

The Petitioner has projected the sales for temporary supply at 21 MU for FY 2015-16.

However, the Commission has not considered sales from Temporary Supply for FY 2015-16 as details such as number of connections, load etc. are not indicated by the Petitioner. Further, whether there will be any temporary connections or not during FY 2015-16 cannot be forecasted.

**Total Energy Sales:**

The total category-wise sales for FY 2015-16, projected by the Petitioner, and approved by the Commission, based on the above analysis, are given in the Tables below:

**Table 8.21: Projection of Consumption for FY 2015-16 by the Petitioner**

| (MU)              |                            |                             |
|-------------------|----------------------------|-----------------------------|
| Consumer Category | Approved for<br>FY 2014-15 | Projected for<br>FY 2015-16 |
| Domestic          | 610.6                      | 652.84                      |
| Hut services      | 10                         | 10.00                       |
| Commercial        | 179.4                      | 193.70                      |
| Agriculture (HP)  | 56.6                       | 56.63                       |

| Consumer Category | Approved for<br>FY 2014-15 | Projected for<br>FY 2015-16 |
|-------------------|----------------------------|-----------------------------|
| Street lighting   | 29.2                       | 30.61                       |
| LT Industrial     | 220.5                      | 235.98                      |
| Water tanks       | 51                         | 53.55                       |
| Temporary Supply  | 20                         | 21.00                       |
| HT Industrial     | 929.3                      | 994.33                      |
| HT Govt. Estates  | 50                         | 53.00                       |
| HT EHT Industrial | 345.6                      | 366.30                      |
| <b>Total</b>      | <b>2502.1</b>              | <b>2667.94</b>              |

Table 8.22: Approved Category –Wise Sales for the FY 2015-16

| Sl. No. | Category                                      | Actual sales<br>For FY 2013-14<br>(MU) | Growth rate<br>Adopted<br>(%) | Approved<br>Sales for<br>FY 2015-16<br>(MU) |
|---------|---|--|-------------------------------|---|
| 1       | Domestic(including Hut Services)              | 612.09                                 | 6.77%                         | 697.00                                      |
| 2       | Commercial                                    | 181.00                                 | 8%                            | 211.00                                      |
| 3       | Agriculture                                   | 57.00                                  | 0%                            | 57.00                                       |
| 4       | Street lighting                               | 26.00                                  | 5%                            | 29.00                                       |
| 5       | LT Industrial (including water tanks)         | 226.10                                 | 11.00%                        | 279.00                                      |
| 6       | HT Industrial                                 | 878.01                                 | 7%                            | 1005.00                                     |
| 7       | HT Govt. Establishment                        | 48.77                                  | 6%                            | 55.00                                       |
| 8       | EHT Industrial                                | 326.65                                 | 6%                            | 367.00                                      |
|         | <b>Total<br/>(Excluding Temporary Supply)</b> | <b>2355.62</b>                         |                               | <b>2700.00</b>                              |

#### 8.4 Transmission and Distribution Losses:

##### Petitioner's submission

The Petitioner has submitted that, considering the optimal distribution loss level of PED, it is technically difficult to further reduce the transmission and distribution losses and that efforts are being made to reduce these losses further and in line with that, a 0.25% reduction in losses every year is considered for the control period.

The PED has proposed distribution loss for FY 2015-16, as given in the Table below:

Table 8.23: Projected Distribution Loss by PED for FY 2015-16

| Particulars             | FY 2015-16 |
|-------------------------|------------|
| Distribution losses (%) | 11.75      |

**Commission's Analysis:**

The approved losses by the Commission for the FY 2012-13, FY 2013-14 and FY 2014-15 have been 12.50%, 12.50% and 12.00% respectively.

The Commission considers the proposal of the Petitioner to reduce the losses for FY 2015-16 at 0.25% over the approved losses of 12% for FY 2014-15 is reasonable since further reduction from 12.00% is a slow process and, accordingly, approves the T&D losses for FY 2015-16 as given in the Table below:

**Table 8.24: T&D losses approved by the Commission for FY 2015-16**

| Particulars    | FY 2015-16 |
|----------------|------------|
| T&D Losses (%) | 11.75      |

**8.5 Energy Balance****Petitioner's Submission:**

Based on the submissions made, the PED has proposed the energy balance, as given in the Table below.

**Table 8.25: Projected Energy Balance for FY 2015-16**

| S. No | Particulars                              | FY 2015-16      |
|-------|--|-----------------|
| A     | <b>ENERGY REQUIREMENT</b>                |                 |
| 1     | Energy sales in the UT (MU)              | 2,667.91        |
| 2     | Distribution losses (%age)               | 11.75%          |
| 3     | Energy required for the Territory (MU)   | 3,023.13        |
| 4     | Add: Sales to common pool Consumers / UI | -               |
| 5     | Energy Requirement at Periphery          | <b>3,023.13</b> |
| B     | <b>ENERGY AVAILABILITY</b>               |                 |
| 1     | Gross Energy Purchase                    | 3,164.80        |
| 2     | <b>External losses (MU)</b>              | 141.67          |
| 3     | <b>Net Energy Availability</b>           | <b>3,023.13</b> |

**Commission's Analysis:**

Based on the approved sales, T&D losses and the energy savings approved by the Commission, the energy balance approved is as given in the Table below:

**Table 8.26: Approved Energy Balance for FY 2015-16**

| S. No | Particulars                 | Approved for FY 2015-16 |
|-------|-----------------------------|-------------------------|
| A     | <b>ENERGY REQUIREMENT</b>   |                         |
| 1     | Energy sales in the UT (MU) | 2700.00                 |

| S. No | Particulars                              | Approved for FY 2015-16 |
|-------|--|-------------------------|
| 2     | Distribution losses (%age)               | 11.75%                  |
| 3     | Energy required for the Territory (MU)   | 3059.00                 |
| 4     | Add: Sales to common pool Consumers / UI | -                       |
| 5     | Energy Requirement at Periphery          | <b>3059.00</b>          |
| B     | <b>ENERGY AVAILABILITY</b>               |                         |
| 1     | Gross Energy Purchase                    | 3202.00                 |
| 2     | <b>External losses (MU)</b>              | 143.00                  |
| 3     | <b>Net Energy Availability</b>           | <b>3059.00</b>          |

## 8.6 Power Purchase Quantum and Costs

### Petitioner's Submission:

The Petitioner has submitted that the power requirement for FY 2015-16 would be met from the following sources:

- Central Generating Stations
- PPCL
- TNEB & KSEB

For estimating the power purchase cost for the control period, Merit Order Dispatch Principles (MOD) have been considered. While full fixed (capacity) charges have been considered and the variable charges corresponding to the cheaper sources of power have been considered, no variable charges have been taken into consideration in respect of energy not considered for power purchase (according to the Merit Order Dispatch Principles).

The following assumptions have been considered for projecting the quantum and cost of power purchase:

**Share Allocation:** The firm allocation and allocation from the unallocated quota has been considered as per the notification of the Southern Region Power Committee, vide SRPC Order No: SRPC/SE-I/5 (REA)/UA/2014 dated 22.10.2014.

**Fixed Charges:** The Tariff Regulations for the tariff period FY 2014-19 have recently been notified by CERC. However, CERC has not issued the Tariff Orders for the FY 2014-15 for the central generating stations, based on the new Regulations. In the absence of the Tariff Orders for FY 2014-15 of the central generating stations, the Petitioner has considered the Annual Fixed Charges of FY 2014-15 (H1 actuals) as

base year for each generating station for estimating the fixed charges for the control period, with an escalation of 4% on the FY 2014-15 cost approved by the Commission, based on the same principles.

**Variable Charges:** The Petitioner has considered the actual average variable cost of the first half (H1) of FY 2014-15 as base year for consideration of per unit variable charges for various plants for FY2014-15 and has escalated the cost by 5% y-o-y during the control period. For nuclear plants, Madras APS and Kaiga, the unit rate of Rs2.03/ kWh and Rs2.98/ kWh has been considered and the same has been escalated by 5% every year.

For TNEB, the present applicable tariff of Rs. 3.47/unit has been considered for FY 2014-15 and the same has been escalated by 5% Y-o-Y. For KSEB, the present applicable tariff of Rs.4.45/ unit has been considered for FY 2014-15 and escalated by 5%. For PPCL, the average variable cost of Rs.2.90/ kWh (for first five months of FY 2014-15) has been considered and escalated at 5% for the control period. For NTECL Vallur, the average rate of Rs.1.96/ kWh has been considered and escalated at 5% for the control period.

The nuclear plants are considered, as “must run” and have not been subjected to MOD Principles. Also, TNEB (Karaikal), KSEB and PPCL have been considered as must run and not subjected to the MOD Principles.

For determining the power purchase cost, the Merit Order Dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the UT has been calculated from the plants at the top of the merit order.

Fixed Charges from all the generating stations (irrespective of the merit order) have been considered for arriving at the power purchase cost.

**UI Overdrawal/Underdrawal:** As per the merit order principles adopted for estimating the energy requirement for the control period, no surplus sale of power has been considered for the control period and the power purchase corresponding

to meeting the requirement. The UI over-drawal has not been considered for the control period. Further, the UI overdrawal/underdrawal quantum and amount would be submitted at the time of true-up, based on the actual performance during the year, based on the actual UI bills.

**PGCIL losses:** External and internal losses have been assumed at 5% and at 4% respectively for TNEB. For PPCL and KSEB, the external losses have been considered as nil as these are within the periphery of the licensee area.

**Transmission Charges:** The Petitioner has considered the transmission charges approved by the Commission for FY2014-15 and has, accordingly, calculated the transmission charges per unit for PGCIL and escalated the same by 5% y-o-y. For POSOCO and PCKL, the FY 2014-15 charges have been escalated by 5% y-o-y for FY 2015-16.

#### **Renewable Purchase Obligations**

As per JERC (Procurement of Renewable Energy) Regulations, 2010, Clause 1, Sub-Clause (1):

*“Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year.”*

The RPO requirements, as per the draft amendments to JERC (Procurement of Renewable Energy) Regulations, 2014, have been considered for the control period.

The Petitioner has to purchase a certain percentage of total energy purchase for sale to the consumers in its area from renewable energy sources, with specific solar and non-solar RPO content.

The RPO obligation for FY 2015-16 has been considered by assuming the fulfilment of RPO obligation through the purchase of REC certificates. The Petitioner has considered the amount corresponding to the prevailing floor price of REC certificates, at the time of filing the petition as per the CERC Order dated August 23, 2011. The Solar REC trading price of Rs.9300/ REC and non-solar trading price of Rs.1500/ REC has been considered for estimation of RPO compliance cost. The RPO compliance cost for the control period is shown below.

Table 8.27: RPO Compliance Cost as Projected by the PED

| Sl. No.  | Item                         | Projected in the petition for FY 2015-16 | Revised Petitioner's submission for FY 2015-16 |
|----------|------------------------------|--|--|
| <b>A</b> | <b>Sales (in MUs)</b>        | 2668                                     | 2668   |
| <b>B</b> | <b>Percentage (%)</b>        | <b>3.55%</b>                             | <b>3.55%</b>                                   |
| 1        | Solar                        | 0.85%                                    | 0.85%  |
| 2        | Non-Solar                    | 2.70%                                    | 2.70%  |
| <b>C</b> | <b>Million Units</b>         | 94.71                                    | 94.71  |
| 1        | Solar                        | 22.68                                    | 22.68  |
| 2        | Non-Solar                    | 72.03                                    | 72.03  |
| <b>D</b> | <b>Rate/kWh</b>              |  |  |
| 1        | Solar                        | 9.30                                     | 4.65   |
| 2        | Non-Solar                    | 1.50                                     | 1.50   |
| <b>E</b> | <b>Cost (Rs. Crore)</b>      |  |  |
| 1        | Solar                        | 21.08                                    | 10.55  |
| 2        | Non-Solar                    | 10.81                                    | 10.81  |
| <b>F</b> | <b>TOTAL COST (Rs.Crore)</b> | <b>31.90</b>                             | <b>21.36</b>                                   |

Subsequent to the Technical validation session held on 13<sup>th</sup> Feb, 2015. EDP modified the RPO compliance cost considering the solar REC at an average price of Rs. 4650/- per REC. CERC notified on 30<sup>th</sup> Dec, 2014 the floor price of Rs. 3500/- and forbearance price at Rs. 5800/- and EDP has considered the average of floor price & forbearance price for arrive at RPO Compliance cost.

The Petitioner would like to bring to the notice of the Commission that in respect of the obligation for purchase of solar energy, PED plans to purchase the energy generated from the following solar PV projects envisaged to be set up under various Government/ private/ NGO sectors, to meet its RPO under solar category:

- PED has confirmed its willingness to avail power to the extent of 10 MW of solar power, allocated by MNRE under Phase 2 Batch-I of JNNSM at a levelised tariff of Rs. 5.50/ kWh.
- Two number of PSUs, namely, Pondicherry Co-op Spinning Mills and Pondicherry State Co-op Sugar Mills, have proposed to set-up grid connected solar PV plants of capacities 4MW and 5MW respectively in their factory premises, with the support of Energy Efficiency Services Ltd. (EESL) and Solar Energy Corporation Ltd (SECL).
- PED has given its consent to purchase the entire power generated from the solar



PV power plant of capacity 5 MW proposed to be set-up at Karaikal, by PPCL.

- Considering the vast potential for setting up of solar PV plants in the UT of Puducherry, PED has planned to set-up its own ground mounted solar PV plants of capacity 1 MW each at five locations (four in Puducherry region and one in Yanam region) with technical support of SECL during FY 2015-16. Further, the Department also plans to set-up roof-top solar PV plants for future requirements with an aggregate capacity of ~5 MW, on the roofs of high rise Government buildings during FY2016-17

PED has not considered the quantum and the cost of purchase of power from these plants as they are still in the nascent stage. The purchase of power from these plants will be included in the ARRs of the subsequent years, once the plants are Commissioned and they start supplying power to PED.

The Commission is requested to approve the purchase of RECs and the request, as discussed above, for the purpose of meeting the RPO requirement.

#### **Power Purchase**

The Petitioner requested the Commission to approve the total quantum and cost of power purchase for FY 2015-16, based on MOD Principles, as summarised below:

Table 8.28: Power Available and Power Procurement (MoD) for FY 2015-16 as projected by the Petitioner

| Sr. No.    | Source                          | Capacity (MW) | Firm allocation to Licensee |            | Avail. / PLF (in %) | Gross Generation (MU) | Aux consumption (%) | Net Generation (MU) | Extra-nal Losses (%) | Energy recd. by Licensee (MU) | Power Available                    | Power Procurement (MoD) |
|------------|---------------------------------|---------------|-----------------------------|------------|---------------------|-----------------------|---------------------|---------------------|----------------------|-------------------------------|------------------------------------|-------------------------|
|            |                                 |               |                             |            |                     |                       |                     |                     |                      |                               | Net MU's at Distribution Periphery |                         |
|            |                                 |               | %                           | MW         |                     |                       |                     |                     |                      |                               | FY 2015-16                         | FY 2015-16              |
| 1          | 2                               | 3             | 4                           |            | 5                   | 6                     | 7                   | 8                   | 9                    | 10                            | 11                                 | 14                      |
| <b>A</b>   | <b>Central Sector Power</b>     |               |                             |            |                     |                       |                     |                     |                      |                               |                                    |                         |
| <b>I</b>   | <b>NTPC</b>                     | <b>5600</b>   | <b>3.63%</b>                | <b>203</b> |                     | <b>1,500.59</b>       |                     | <b>1,383.15</b>     |                      | <b>1,313.99</b>               | <b>1,313.99</b>                    | <b>1,092.20</b>         |
|            | RSTPS Stage I & II              | 2100          | 4.47%                       | 94         | 85.00%              | 698.96                | 6.50%               | 653.52              | 5%                   | 620.85                        | 620.85                             | 620.85                  |
|            | RSTPS Stage -III                | 500           | 4.74%                       | 24         | 83.00%              | 172.32                | 6.50%               | 161.12              | 5%                   | 153.06                        | 153.06                             | 35.79                   |
|            | Talcher Stage- II               | 2000          | 3.44%                       | 69         | 85.00%              | 512.28                | 10.50%              | 458.49              | 5%                   | 435.57                        | 435.57                             | 435.57                  |
|            | Simhadri Stage- II              | 1000          | 1.67%                       | 17         | 80.00%              | 117.03                | 6.00%               | 110.01              | 5%                   | 104.51                        | 104.51                             |                         |
| <b>II</b>  | <b>NLC</b>                      | <b>2390</b>   | <b>5.88%</b>                | <b>141</b> |                     | <b>1,143.44</b>       |                     | <b>1,018.55</b>     |                      | <b>967.62</b>                 | <b>842.04</b>                      | <b>842.04</b>           |
|            | NLC TPS II Stage I              | 630           | 12.09%                      | 76         | 95.00%              | 633.86                | 12.00%              | 557.80              | 5%                   | 529.91                        | 529.91                             | 529.91                  |
|            | NLC TPS II Stage II             | 840           | 3.53%                       | 30         | 85.00%              | 220.79                | 10.00%              | 198.71              | 5%                   | 188.77                        | 188.77                             | 188.77                  |
|            | NLC TPS I (Expn)                | 420           | 4.06%                       | 17         | 95.00%              | 141.91                | 8.50%               | 129.84              | 5%                   | 123.35                        | 123.35                             | 123.35                  |
|            | NLC TPS II (Expn)               | 500           | 3.53%                       | 18         | 95.00%              | 146.88                | 10.00%              | 132.19              | 5%                   | 125.59                        |                                    | -                       |
| <b>III</b> | <b>NPCIL</b>                    | <b>2320</b>   | <b>3.53%</b>                | <b>82</b>  |                     | <b>539.43</b>         |                     | <b>485.49</b>       |                      | <b>461.21</b>                 | <b>362.12</b>                      | <b>362.12</b>           |
|            | MAPS                            | 440           | 1.82%                       | 8          | 70.00%              | 49.11                 | 10.00%              | 44.19               | 5%                   | 41.98                         | 41.98                              | 41.98                   |
|            | KAPS Stage I                    | 880           | 4.09%                       | 36         | 82.00%              | 258.54                | 10.00%              | 232.68              | 5%                   | 221.05                        | 221.05                             | 221.05                  |
|            | Kudankulam                      | 1000          | 3.78%                       | 38         | 70.00%              | 231.79                | 10.00%              | 208.61              | 5%                   | 198.18                        | 99.09                              | 99.09                   |
| <b>IV</b>  | <b>Others</b>                   | <b>2000</b>   | <b>1.35%</b>                | <b>27</b>  | <b>160.00%</b>      | <b>531.03</b>         |                     | <b>517.68</b>       |                      | <b>496.87</b>                 | <b>496.87</b>                      | <b>496.87</b>           |
|            | Others                          | 0             | 0.00%                       | -          | 0.00%               | -                     | 0.00%               |                     | 0%                   | -                             | -                                  | -                       |
|            | TNEB (Pondy)                    | 0             | 0.00%                       | -          | 0.00%               | -                     | 0.00%               |                     | 0%                   | -                             | -                                  | -                       |
|            | TNEB (Karaikal)                 | 0             | 0.00%                       | -          | 0.00%               | 300.32                | 0.00%               | 300.32              | 4%                   | 288.31                        | 288.31                             | 288.31                  |
|            | Vallur Thermal Project          | 1000          | 1.70%                       | 17         | 80.00%              | 119.14                | 6.50%               | 111.39              | 5%                   | 105.82                        | 105.82                             | 105.82                  |
|            | Tuticorin NLC Project           | 1000          | 1.00%                       | 10         | 80.00%              | 70.08                 | 8.00%               | 64.47               | 5%                   | 61.25                         | 61.25                              | 61.25                   |
|            | KSEB                            | 0             | 0.00%                       | -          |                     | 41.49                 | 0.00%               | 41.49               | 0%                   | 41.49                         | 41.49                              | 41.49                   |
| <b>B</b>   | <b>Within State Generations</b> |               |                             |            |                     |                       |                     |                     |                      |                               |                                    |                         |
|            | PPCL                            | 32.5          | 100.00%                     | 33         | 85.00%              | 242.00                | 5.00%               | 229.90              | 0%                   | 229.90                        | 229.90                             | 229.90                  |
| <b>C</b>   | <b>Total</b>                    | <b>12,343</b> | <b>4%</b>                   | <b>485</b> |                     | <b>3,956.49</b>       |                     | <b>3,634.76</b>     |                      | <b>3,469.59</b>               | <b>3,244.91</b>                    | <b>3,023.13</b>         |

\*The availability of power from these plants is subject to signing of MoU/CoD of the plant in the years considered for power purchase.

Table 8.29: Power Procurement Cost projected by the Petitioner for FY 2015-16

| Sl. No.    | Source  | Purchase (MU)   | Variable Charges (Ps./ kWh) | Variable Chagres (Rs.Crore) | Fixed Charges (Rs. Crore) | Total Charges (Rs. Crore) |
|------------|---|-----------------|-----------------------------|-----------------------------|---------------------------|---------------------------|
|            |   | 2015-16         | 2015-16                     | 2015-16                     | 2015-16                   | 2015-16                   |
| 1          | 2   | 3               | 4                           | 5                           | 6                         | 7                         |
| <b>A</b>   | <b>Central Sector Power Stations</b>                            |                 |                             |                             |                           |                           |
| <b>I</b>   |   | <b>1,149.69</b> | <b>212.86</b>               | <b>244.72</b>               | <b>96.36</b>              | <b>341.08</b>             |
|            | RSTPS Stage I & II  | 653.52          | 251.98                      | 164.68                      | 33.75                     | 198.43                    |
|            | RSTPS Stage –III  | 37.67           | 262.68                      | 9.89                        | 11.98                     | 21.88                     |
|            | Talcher Stage- II   | 458.49          | 153.00                      | 70.15                       | 39.82                     | 109.97                    |
|            | Simhadri Stage- II  | -               | 262.61                      | -                           | 10.80                     | 10.80                     |
| <b>II</b>  | <b>NLC</b>  | <b>886.35</b>   | <b>227.09</b>               | <b>201.28</b>               | <b>67.90</b>              | <b>269.19</b>             |
|            | NLC TPS II Stage I  | 557.80          | 228.92                      | 127.69                      | 36.71                     | 164.40                    |
|            | NLC TPS II Stage II   | 198.71          | 228.85                      | 45.47                       | 12.61                     | 58.08                     |
|            | NLC TPS I (Expn)  | 129.84          | 216.57                      | 28.12                       | 18.59                     | 46.71                     |
|            | NLC TPS II (Expn)   | -               | -                           | -                           | -                         | -                         |
| <b>III</b> | <b>NPCIL</b>  | <b>381.18</b>   | <b>301.60</b>               | <b>114.97</b>               | <b>-</b>                  | <b>114.97</b>             |
|            | MAPS  | 44.19           | 212.88                      | 9.41                        | -                         | 9.41                      |
|            | KAPS Stage I  | 232.68          | 313.24                      | 72.89                       | -                         | 72.89                     |
|            | Kudankulam  | 104.31          | 313.24                      | 32.67                       | -                         | 32.67                     |
| <b>IV</b>  | <b>Others</b>   | <b>517.68</b>   | <b>320.54</b>               | <b>165.94</b>               | <b>30.00</b>              | <b>195.94</b>             |
|            | Others  | -               | -                           | -                           | -                         | -                         |
|            | TNEB (Pondy)  | -               | -                           | -                           | -                         | -                         |
|            | TNEB (Karaikal)   | 300.32          | 364.35                      | 109.42                      | 15.72                     | 125.15                    |
|            | Vallur Thermal Project  | 111.39          | 207.79                      | 23.15                       | 11.17                     | 34.31                     |
|            | Tuticorin NLC Project   | 64.47           | 210.00                      | 13.54                       | 3.11                      | 16.65                     |
|            |   | 41.49           | 477.98                      | 19.83                       | -                         | 19.83                     |
| <b>B</b>   | <b>State Generations</b>  |                 |                             |                             |                           |                           |
|            | <b>PPCL</b>   | 229.90          | 300.26                      | 69.03                       | 26.09                     | 95.12                     |
| <b>C</b>   | <b>OTHER CHARGES</b>  |                 |                             |                             |                           | <b>73.78</b>              |
|            | <i>PGCIL Transmission Charges, Wheeling &amp; Other Charges</i> |                 |                             |                             |                           | 71.78                     |
|            | <i>POSOCO</i>   |                 |                             |                             |                           | 1.05                      |
|            | <i>PCKL</i>   |                 |                             |                             |                           | 0.95                      |
| <b>D</b>   | <b>RPO Compliance Cost</b>                                      |                 |                             |                             |                           | 31.89                     |
| <b>E</b>   | <b>Rebate</b>   |                 |                             |                             |                           | (13.10)                   |
| <b>F</b>   | <b>Total</b>  | <b>3,164.80</b> | <b>251.50</b>               | <b>795.93</b>               | <b>220.36</b>             | <b>1,108.87</b>           |

**Commission's Analysis:**

For estimating the power purchase cost for the FY 2015-16, Merit Order Principles have been considered. While full fixed (capacity) charges have been considered in all cases and the variable charges corresponding to the cheaper sources of power have been considered, no variable charges have been taken into account in respect of energy not considered for purchase (according to the Merit Order Dispatch Principles).

The Commission has considered the nuclear plants as “must run” and not subjected these to merit order dispatch. TNEB (Karaikal), KSEB and PPCL have also been considered as “must run” and not subjected to merit order principles.

For determining the power purchase cost, Merit Order Dispatch Principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the UT has been calculated for the plants at the top of the merit order.

Fixed Charges for all the generating stations (irrespective of the merit order) have been considered for arriving at the power purchase cost.

The following assumptions have been considered for projecting the requirement and cost for the FY 2015-16.

**Share Allocation:** The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations as per the notification of the Southern Region Power Committee, vide SRPC Order No: SRPC/SE-I/54/UA/2014 dated 18.11.2014, effective from 00:00 Hrs of 20.11.2014.

**Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing stations based on the installed capacity and the average Plant Load Factor for the past years (FY 2011-12, FY 2012-13 and FY 2013-14). The net energy sent out has been considered, after taking into account the applicable auxiliary consumption as per the Central Electricity Regulatory Commission (Terms

and Conditions of Tariff) Regulations. For the stations, namely, NLC TPS II (Expn) 500MW and Tuticorin NLC, which will come into commercial operation, during the MYT period, the availability, as projected by the Petitioner, has been considered. For Kudankulam 1000MW, however, the availability has been considered at 3.35% as per the SRPC Order No. SRPC/SE-I/54/UA/2014 dated 07.10.2014.

**Fixed Charges:** The Tariff Regulations for the tariff period 2014-19 have recently been notified by CERC. However, the CERC has not issued the Tariff Orders, based on the new Regulations, for FY 2014-15 for the central generating stations. In the absence of the Tariff Orders for FY 2014-15 for the central generating stations, the Commission has considered the Annual Fixed Charges of FY 2013-14 (as per the latest available Tariff Orders) for estimating the fixed charges for the FY 2015-16, are considered in the T.O dated 25.04.2014 for FY 2014-15. For the stations which will come into commercial operation during FY 2015-16, the fixed charges, as projected by the Petitioner, have been considered.

**Variable Charges:** The Commission has considered the average variable cost of the period April 2014 to September, 2014 (as per actuals) for consideration of the per unit variable charges. For nuclear plants, Madras APS and Kaiga, the unit rate of Rs. 2.03/unit and Rs 2.98/unit respectively have been considered.

For TNEB, the present rate of Rs 3.47/unit has been considered. For KSEB, the average variable cost for the first five months of FY 2014-15 has been considered at Rs 4.45/unit. For PPCL, the average variable cost of the first five months of 2014-15 has been considered at Rs 2.62/unit. For NTECL, Vallur, the present average rate of Rs. 2.00/unit has been considered. For the new plant at Kudankulam (NPCIL), the rate of Rs. 2.98/unit, i.e., equal to that of KAPS STAGE I has been considered. For the new plant NLC TPS II expansion, the same rate as that of NLC TPS I expansion rate of Rs. 2.06/Unit has been considered.

For the new plant Tuticorin NLC, the same rate of Rs. 2.10/Unit, as projected by the Petitioner, has been considered.

No escalation in variable charge rates have been considered during FY 2015-16, as these will be taken care of in the Fuel and Power Purchase Adjustment formula. PED may claim any variable charge in the Power Purchase Cost as per the formula.

**UI overdrawal/underdrawal:** The UI overdrawal/ purchase from power exchange has not been considered for the FY 2015-16 since the energy requirement is more than the availability. Further, the UI over-drawl/under-drawl, quantum and amount would be considered at the time of true-up, based on the actual performance during the respective years, based on the UI bills. The unit cost for UI drawl/purchase from power exchange has been tentatively considered at Rs. 5/kWh.

**PGCIL losses:** Losses at 5% have been assumed as reasonable (as per SRPC website) and at 4%, for TNEB. For PPCL and KSEB, being within the periphery of the utility area, external loss has been considered as nil.

**Transmission Charges:**

The actual PGCIL transmission charges from April, 2014 to September, 2014 were 30.82 Crore and POSOCO and other charges were Rs 0.42crores. Annualizing for FY 2014-15, the total charges would be Rs 61.64 Crore plus Rs 0.84 Crore. The Commission considers the same for the FY 2015-16 also without proposing any escalation.

**Renewable Purchase Obligations**

As per JERC (Procurement of Renewable Energy) Regulations, 2010, Clause 1, Sub - Clause (1):

*"Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year."*

The Commission, as per its Order dated 19<sup>th</sup> Feb, 2014 has specified the RPO obligations of the utilities, and, accordingly, the RPO has been considered as 3.55% for FY 2015-16 (0.85% from solar and 2.70% from non-solar sources).

The RPO obligation for the FY 2015-16 has been considered by assuming the fulfillment of RPO obligation through the purchase of REC certificates. This is in consideration of the fact that the utility has so far not been able to meet its RPO obligation through renewable energy purchase in energy terms. The Commission has allowed the amount corresponding to the prevailing floor price of REC certificates, as approved by CERC in Suo-moto petition SM/016/2014 dated 30<sup>th</sup> Dec, 2014.

The Solar REC trading price of Rs 3500/REC and non-solar trading price of Rs. 1500/REC is considered and allowed.

**The RPO compliance costs work out at Rs 18.97 Crore for FY 2015-16, and has, accordingly, been considered by the Commission.**

**Table 8.30: Renewable Purchase Obligation (RPO) Approved by the Commission for FY 2015-16**

| Sl. No. | Source                                       | Purchase (in MUs) | Price/ Certificate (Rs/kWh) | Total cost (Rs. Crore) |
|---------|--|-------------------|-----------------------------|------------------------|
|         | <b>Renewable Energy Sources (FY 2015-16)</b> |                   |                             |                        |
| 1       | <b>Total Sales</b>                           | 2700              |                             |                        |
| 2       | 2.70% from non-solar                         | 72.90             | 1.50                        | 10.94                  |
| 3       | 0.85% from solar                             | 22.95             | 3.50                        | 8.03                   |
| 4       | <b>Total</b>                                 | <b>95.85</b>      |                             | <b>18.97</b>           |

**Total Power Purchase Quantum and Cost**

Accordingly, the Commission has approved power purchase quantum of 3202MU, for the FY 2015-16, as indicated in the Table below:

Table 8.31: Power Purchase Quantum approved by the Commission for FY 2015-16

| Sl. No     | Source                              | Capacity (MW) | PLF (in %) | Gross Generation (MU) | Auxiliary Consumption (%) | Net Generation (MU) | Firm allocation to PED (%) | Purchase FY 2015-16 (MU) |
|------------|-------------------------------------|---------------|------------|-----------------------|---------------------------|---------------------|----------------------------|--------------------------|
| <b>A</b>   | <b>Central sector power station</b> |               |            |                       |                           |                     |                            |                          |
| <b>I</b>   | <b>NTPC</b>                         |               |            |                       |                           |                     |                            |                          |
|            | RSTPS Stage I&II                    | 2100          | 89.66      | 16493.85              | 6.50%                     | 15421.75            | 4.33%                      | 668                      |
|            | RSTPS Stage III                     | 500           | 91.19      | 3994.12               | 6.50%                     | 3734.50             | 4.60%                      | 172                      |
|            | Talcher Stage-II                    | 2000          | 83.13      | 14564.96              | 10.50%                    | 13035.64            | 3.31%                      | 431                      |
|            | Simhadri Stage-II                   | 1000          | 82.17      | 7198.38               | 6.00%                     | 6766.48             | 1.65%                      | -                        |
| <b>II</b>  | <b>NLC</b>                          |               |            |                       |                           |                     |                            |                          |
|            | NLC TPS II STAGE I                  | 630           | 86.27      | 4760.88               | 12.00%                    | 4189.58             | 12.10%                     | 507                      |
|            | NLC TPS II STAGE II                 | 840           | 86.94      | 6397.39               | 10.00%                    | 5757.65             | 3.55%                      | 204                      |
|            | NLC TPS I (EXPAN)                   | 420           | 83.16      | 3059.62               | 8.50%                     | 2799.55             | 4.08%                      | 114                      |
|            | NLC TPSII (EXPAN)                   | 500           | 75.00      | 3285.00               | 8.50%                     | 3005.78             | 3.53%                      | -                        |
| <b>III</b> | <b>NPCIL</b>                        |               |            |                       |                           |                     |                            |                          |
|            | MAPS                                | 440           | 63.70      | 2455.38               | 10.00%                    | 2209.84             | 1.82%                      | 40                       |
|            | KAPS STAGE 1 U1&2                   | 440           | 75.27      | 2901.21               | 10.00%                    | 2611.09             | 4.10%                      | 107                      |
|            | KAPS STAGE 1 U3&4                   | 440           | 73.28      | 2824.38               | 10.00%                    | 2541.94             | 4.10%                      | 104                      |
|            | KUNDAKULAM                          | 1000          | 69.00      | 6044.40               | 10.00%                    | 5439.96             | 3.35%                      | 91                       |
| <b>IV</b>  | <b>OTHERS</b>                       |               |            |                       |                           |                     |                            |                          |
|            | TNEB (PONDY)                        |               |            |                       |                           |                     |                            | 0                        |
|            | TNEB (KARAIKAL)                     |               |            |                       |                           |                     |                            | 319                      |
|            | VALLUR THERMAL PROJECT              | 1000          | 51.57      | 4517.53               | 6.50%                     | 4223.89             | 1.70%                      | 89                       |
|            | TUTICORIN NLC PROJECT               | 1000          | 87.13      | 7632.88               | 8.50%                     | 6984.09             | 1.00%                      | 71                       |
|            | KSEB                                |               |            |                       |                           |                     |                            | 41                       |
| <b>B</b>   | <b>WITHIN STATE GENERATION</b>      |               |            |                       |                           |                     |                            |                          |
| <b>I</b>   | PPCL                                | 33            | 88.32      | 255.32                | 5.00%                     | 242.55              | 100%                       | 243                      |
| <b>C</b>   | <b>Others</b>                       |               |            |                       |                           |                     |                            |                          |
|            | UI/ Power Exchange                  |               |            |                       |                           |                     |                            | -                        |
|            | <b>TOTAL</b>                        |               |            |                       |                           |                     |                            | <b>3202</b>              |



Table 8.32: Power Purchase Cost approved by the Commission for FY 2015-16

| Sl. No.    | Source                             | Purchase in FY 2015-16 (MU) | PGCIL Loss (%) | Energy available at periphery FY 2015-16 (MU) | VC (Rs./kWh) | Fixed charges (Rs. Crore) | Total (Rs. Crore) |
|------------|------------------------------------|-----------------------------|----------------|---|--------------|---------------------------|-------------------|
| <b>A</b>   | <b>Central Sector PowerStation</b> |                             |                |   |              |                           |                   |
| <b>I</b>   | <b>NTPC</b>                        |                             |                |   |              |                           |                   |
|            | RSTPS Stage I&II                   | 668                         | 5.00%          | 634   | 2.40         | 41.47                     | 201.73            |
|            | RSTPS Stage III                    | 172                         | 5.00%          | 163   | 2.50         | 15.97                     | 58.92             |
|            | Talcher Stage-II                   | 431                         | 5.00%          | 410   | 1.46         | 19.67                     | 82.66             |
|            | Simhadri Stage-II                  |                             | 5.00%          | 0   | 2.50         | 19.36                     | 19.36             |
| <b>II</b>  | <b>NLC</b>                         |                             |                |   |              |                           |                   |
|            | NLC TPS II STAGE I                 | 507                         | 5.00%          | 482   | 2.18         | 31.76                     | 142.28            |
|            | NLC TPS II STAGE II                | 204                         | 5.00%          | 194   | 2.18         | 12.01                     | 56.57             |
|            | NLC TPS I (EXPN)                   | 114                         | 5.00%          | 109   | 2.06         | 16.4                      | 39.93             |
|            | NLC TPSII (EXPN)                   |                             | 5.00%          | 0   | 2.06         | 0                         | 0.00              |
| <b>III</b> | <b>NPCIL</b>                       |                             |                |   |              |                           |                   |
|            | MAPS                               | 40                          | 5.00%          | 38  | 2.03         | 0                         | 8.16              |
|            | KAPS STAGE 1 U1&2                  | 107                         | 5.00%          | 102   | 2.98         | 0                         | 31.90             |
|            | KAPS STAGE 1 U3&4                  | 104                         | 5.00%          | 99  | 2.98         | 0                         | 31.06             |
|            | KUDANKULAM                         | 91                          | 5.00%          | 86  | 1.22         | 0                         | 11.10             |
| <b>IV</b>  | <b>OTHERS</b>                      |                             |                |   |              |                           |                   |
|            | TNEB (PONDY)                       | 0                           | 0.00%          | 0   |              | 0                         | 0.00              |
|            | TNEB (KARAIKAL)                    | 319                         | 4.00%          | 306   | 3.47         | 0                         | 110.69            |
|            | VALLUR THERMAL PROJECT             | 89                          | 5.00%          | 85  | 1.98         | 3.85                      | 21.47             |
|            | TUTICORIN NLC PROJECT              | 71                          | 5.00%          | 67  | 1.98         | 11.17                     | 25.23             |
|            | KSEB                               | 41                          | 0.00%          | 41  | 4.55         | 0                         | 18.66             |
| <b>B</b>   | <b>Within State Generations</b>    |                             |                |   |              |                           |                   |
| <b>I</b>   | PPCL                               | 243                         | 0.00%          | 243   | 2.86         | 25.09                     | 94.46             |
| <b>C</b>   | <b>Others</b>                      |                             |                |   |              |                           | 81.45             |
|            | <b>UI/Power Exchange</b>           |                             |                |   |              |                           |                   |
|            | POSO                               |                             |                |   |              |                           | 0.84              |
|            | PGCIL, PCKL, etc.                  |                             |                |   |              |                           | 61.64             |
|            | RPO compliance cost                |                             |                |   |              |                           | 18.97             |
|            | <b>TOTAL</b>                       | <b>3202</b>                 |                | <b>3059</b>                                   |              |                           | <b>1035.63</b>    |

**Table 8.33: Power Purchase Quantum and Cost approved by the Commission for the FY 2015-16**

| Item                           | FY 2015-16              |          |
|--------------------------------|-------------------------|----------|
|                                | Petitioner's submission | Approved |
| Power Purchase Quantum (in MU) | 3164.80                 | 3202     |
| Power Purchase Cost (Rs Crore) | 1108.87                 | 1035.63  |

Further, any variation on account of Fuel and Power Purchase cost shall be calculated as per the formula specified by the Commission separately and any impact shall be passed directly to the consumers.

The licensee shall compute cost variations in fuel and power procurement on a quarterly basis and adjustment shall be made in consumer bills starting after a month following the end of the quarter, based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified separately by the Commission as per the Regulation. **For the purpose of calculation using FPPCA formula notified by the Commission, the approved per unit cost of power purchase (approved) for use in the FPPCA formula is 361 paisa per unit for FY 2015-16.** The approved per unit cost of power purchase for the respective years to be considered in the FPPCA formula excludes transmission charges of PGCIL, SLDC charges, RLDC charges and charges for reactive energy.

## **8.7 Fixed Cost**

### **O&M Expenses**

As specified in Regulation 27(3)(b) of JERC Tariff Regulations, 2009 the O&M expenses shall be adjusted according to variation in rate of WPI per annum to determine the O&M expenses for subsequent year. The WPI inflation Index used for computation of Employee Cost, A&G Expenses and R&M Expenses, is given in Table below:

**Table 8.34: WPI inflationary index for previous year**

| S. No. | Financial year                                 | Average WPI |
|--------|--|-------------|
| 1      | FY 2013-14                                     | 177.64      |
| 2      | FY 2012-13                                     | 167.62      |
| 3      | Increase over previous year %<br>[(1-2)/2]*100 | 5.98%       |

PED has submitted that inflation index for employee cost, A&G Expenses and R&M expenses is linked to the increase in WPI per annum as given in Table below:

**Table 8.35: Inflation Index of O&M Expenses**

| O&M Expenses  | Inflation Index |
|---------------|-----------------|
| Employee Cost | 5.98%           |
| A&G Expenses  | 5.98%           |
| R&M Expenses  | 5.98%           |

### Employee Expenses

#### Petitioner's Submission

PED has projected the Employee Cost for FY 2015-16 based on average WPI Index of over last three years, i.e., 7.42%, and this has been escalated by considering the employee cost of FY 2014-15. The basis for the same is given in the Table below:

**Table 8.36: Employee Expenses projected by the Petitioner for FY 2015-16**

| Particulars                             | Petitioner's submission |
|---|-------------------------|
| Employee Cost                           | 93.50                   |
| <b>Less:</b> Add/Deduct share of others | 1.44                    |
| <b>Less:</b> Amount capitalised         | 11.16                   |
| <b>Net Employee Cost</b>                | <b>80.91</b>            |

PED has further submitted that the impact of the 7<sup>th</sup> Pay Commission is not considered while projecting the expenses for the Control Period. If this is implemented by the Central Government, PED would submit the same at the time of filing True up.

#### Commission's Analysis

The Commission has considered employee expenses at Rs.75.32 Crore in review for FY 2014-15. Accordingly, the same is considered as base expenditure and considered the employee expenses duly factoring the inflationary escalation for FY 2015-16 as given in the Table below:

**Table 8.37 (A): Employee Expenses Gross Approved by the Commission for FY 2015-16**  
(Rs. Crore)

| Particulars                                    | FY 2015-16   |
|--|--------------|
| Employee Expenses as per FY 2014-15 (RE) Gross | 85.70        |
| Inflationary increase %                        | 5.98%        |
| Inflationary increase                          | 5.12         |
| <b>Employee expenses Gross</b>                 | <b>90.82</b> |

**Table 8.37 (B): Employee Expenses Net Approved by the Commission for FY 2015-16**  
(Rs. Crore)

| Particulars                                     | Approved by the Commission Review FY 2014-15 | FY 2015-16              |                      |
|---|--|-------------------------|----------------------|
|   |  | Petitioner's submission | Approved for 2015-16 |
| Employee Expenses (Gross)                       | 87.04  | 93.50                   | 90.82                |
| Less: Share of Others                           | (1.34)                                       | (1.44)                  | (1.44)               |
| Less: Amount Capitalized                        | (10.39)                                      | (11.16)                 | (11.16)              |
| <b>Net Employee Expenses considered for ARR</b> | <b>75.32</b>                                 | <b>80.91</b>            | <b>78.22</b>         |

**Administrative and General Expenses****Petitioner's Submission**

PED has submitted that, based on the JERC (MYT) Regulations, the employee expenses and A&G Expenses are to be escalated based on last 3 years average WPI Index, i.e., 7.42%. PED has estimated the A&G expenses of FY 2015-16 as given in the Table below:

**Table 8.38: Projected A&G Expenses for FY 2015-16**  
(Rs. Crore)

| Particulars  | Petitioner's Submission |
|--------------|-------------------------|
| A&G Expenses | 5.76                    |

**Commission's Analysis**

The Commission has considered administration and general expenses at Rs.5.36 Crore in review for FY 2014-15. The same is considered as base expenditure and the inflationary escalation of 5.98% as per JERC (Tariff) Regulations, 2009 is applied on the base rate to arrive at the approved A&G expenses for FY 2015-16 as given below:

**Table 8.39: A&G Expenses Approved for FY 2015-16 (Rs. Crore)**

| Particulars                           | Petitioner's submission | Approved for 2015-16 |
|---------------------------------------|-------------------------|----------------------|
| A & G Expenses as per FY 2014-15 (RE) |                         | 5.36                 |
| Inflationary increase %               |                         | 5.98%                |
| Inflationary increase                 |                         | 0.32                 |
| <b>A &amp; G expenses</b>             | <b>5.76</b>             | <b>5.68</b>          |

**R&M Expenses**

PED has submitted that based on the past trend of R&M Expenses is at 3% of GFA over the last 5 years. Therefore, in line with the JERC (MYT) Regulations PED proposes "K" factor as 3% for projections of R&M Expenses for FY 2015-16, as shown below:

**Table 8.40: R&M Expenses projected by the Petitioner for FY 2015-16****(Rs. Crore)**

| Particulars  | Petitioner's submission |
|--------------|-------------------------|
| R&M Expenses | 18.35                   |

**Commission's Analysis**

The Commission has considered repairs and maintenance expenses at Rs.19.12 Crore in review for FY 2014-15. The R&M expenses of FY 2014-15 and factoring the inflationary increase of 5.98% as per JERC (Tariff) Regulations 2009 the R&M expenses for FY 2015-16 works out to Rs.20.26 Crore. However, the Petitioner has claimed Rs.18.35 Crore. Accordingly, the Commission considers the R&M expenses at Rs.18.35 Crore as projected by the Petitioner for FY 2015-16 as given in the Table below:

**Table 8.41: R&M expenses approved for FY 2015-16 (Rs. Crore)**

| Particulars    | Petitioner's submission | Approved for FY 2015-16 |
|----------------|-------------------------|-------------------------|
| R & M expenses | 18.35                   | 18.35                   |

**O&M Expenses****Table 8.42: O&M Expenses approved for FY 2015-16 (Rs. Crore)**

| Particulars       | Approved by the Commission FY 2014-15 (RE) | Petitioner's submission | Approved for FY 2015-16 |
|-------------------|--|-------------------------|-------------------------|
| Employee Expenses | 75.32                                      | 80.91                   | 78.22                   |
| A&G Expenses      | 5.36                                       | 5.76                    | 5.68                    |
| R&M Expenses      | 19.12                                      | 18.35                   | 18.35                   |
| <b>Total</b>      | <b>99.80</b>                               | <b>105.02</b>           | <b>102.25</b>           |

**8.8 Capital Investment and Capitalisation****Petitioner's submission**

PED proposes the capital expenditure of Rs.197.42 crore for FY 2015-16 for various transmission and distribution schemes to augment transmission and distribution systems to meet the growing demand, to reduce T&D losses and improve quality and reliability of supply.

**Commission's analysis:**

The Commission observes in para 1.7 of this order that the petitioner is required to submit the required supporting documents. In the absence of the same, the Commission has taken a decision to approve ARR and determine the tariff for FY 2015-16 only under the JERC (tariff) Regulations, 2009.

The Petitioner is also required to submit the details of capital investment plan, project approval status, project duration, phasing of expenditure, funding pattern, details of fund tie up, cost benefit analysis, improvement in quality or reliability of service etc. The Commission pending approval of the investment plan, provisionally approves the capital investment of Rs.197.42 Crore as proposed by the Petitioner for FY 2015-16.

**8.9 Capitalisation****Petitioner's submission**

PED proposes to capitalise the capital expenditure at 60% during the 1<sup>st</sup> year and balance 40% of capital expenditure in the succeeding year. The Petitioner has proposed the capitalisation at Rs.118.45 Crore in FY 2015-16.

**Commission's analysis:**

The Commission provisionally approves the capitalisation at Rs.118.45 Crore as proposed by the Petitioner for FY 2015-16. However, the same will be reviewed at

the time of Review of FY 2015-16 based on the actual data to be furnished by the petitioner at that time.

#### **8.10 Gross Fixed Assets and Depreciation**

##### **Petitioner's Submission**

PED has submitted the value of opening GFA, additions to GFA and Closing GFA for FY 2015-16 as given in the Table below:

**Table 8.43: GFA projected for FY 2015-16 (Rs. Crore)**

| <b>Particulars</b>                                   | <b>Petitioner's submission</b> |
|--|--------------------------------|
| Opening Value of Assets at the beginning of the year | 611.59                         |
| Additions during the year                            | 118.45                         |
| Gross Fixed Assets at the end of the year            | 730.04                         |

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

The Commission has examined the computation of GFA, additions to GFA and closing GFA for FY 2015-16. The Commission based on the capitalisation approved in the preceding paragraph has arrived the value of GFA for FY 2015-16 as given in the Table below:

**Table 8.44: GFA approved for FY 2015-16 (Rs. Crore)**

| <b>Particulars</b>                                   | <b>Petitioner's submission</b> | <b>Approved for FY 2015-16</b> |
|--|--------------------------------|--------------------------------|
| Opening Value of Assets at the beginning of the year | 611.59                         | 611.69                         |
| Additions during the year                            | 118.45                         | 118.45                         |
| Gross Fixed Assets at the end of the year            | 730.04                         | 730.04                         |

#### **8.11 Depreciation**

##### **Petitioner's submission**

The Petitioner has submitted that as per Regulation 23 of the JERC MYT Regulations, 2014, depreciation shall be calculated on the original cost of fixed assets. The rate of depreciation considered is as per the CERC Regulations, 2014. The Petitioner has computed the depreciation for FY 2015-16 as given in the Table below:

**Table 8.45: Depreciation projected for FY 2015-16 (Rs. Crore)**

| <b>Particulars</b>                                   | <b>Petitioner's submission</b> |
|--|--------------------------------|
| Opening Value of Assets at the beginning of the year | 611.59                         |
| Additions during the year                            | 118.45                         |
| Gross Fixed Assets at the end of the year            | 730.04                         |

| <b>Particulars</b>        | <b>Petitioner's submission</b> |
|---------------------------|--------------------------------|
| Depreciation              | 35.21                          |
| Average Depreciation Rate | 5.25%                          |

**Commission's analysis:**

The Commission has approved opening GFA, additions to GFA and Closing GFA in the preceding paragraphs. The Commission has considered rate of depreciation provisionally at 5.25% as was considered in review for FY 2014-15 for computation of depreciation for FY 2015-16. The Commission based on the approved value of GFA has computed the depreciation for FY 2015-16 as given in the Table below:

**Table 8.46: Depreciation approved for FY 2015-16 (Rs. Crore)**

| <b>Particulars</b>                                   | <b>Petitioner's submission</b> | <b>Approved for FY 2015-16</b> |
|--|--------------------------------|--------------------------------|
| Opening Value of Assets at the beginning of the year | 611.59                         | 611.58                         |
| Additions during the year                            | 118.45                         | 118.45                         |
| Gross Fixed Assets at the end of the year            | 730.04                         | 730.04                         |
| Average GFA  | 670.82                         | 670.81                         |
| Depreciation   | 35.21                          | 35.23                          |
| Average Depreciation Rate                            | 5.25%                          | 5.25%                          |

However, the depreciation amount will be subject to final adjustment at the time of True-up, based on audited accounts.

## **8.12 Interest and Finance Charges**

### **Petitioner's Submission**

The Petitioner has relied on Regulations 23 and 24 of JERC Tariff Regulations, 2009 PED has submitted that it has considered the normative debt funding of 70% as per Regulation 23 of JERC Regulations, 2014, on the capitalisation of fixed assets for FY 2015-16. The rate of interest considered is the prevailing prime lending rate of State Bank of India as on 1<sup>st</sup> April of the relevant year and the finance charges proposed during the year.

The normative loan and interest and finance charges claimed are given in Table below:



**Table 8.47: Interest and finance charges projected for FY 2015-16 (Rs. Crore)**

| Sl. No. | Particulars                                 | Petitioner's submission |
|---------|---|-------------------------|
| 1       | Opening Normative Loan                      | 118.44                  |
| 2       | Add: Normative Loan during the Year         | 82.92                   |
| 3       | Less: Normative Repayment                   | 35.21                   |
| 4       | <b>Closing Normative Loan</b>               | <b>166.15</b>           |
| 5       | Average Normative Loan                      | 142.30                  |
| 6       | Rate of Interest (@SBAR rate)               | 14.75 %                 |
| 7       | <b>Interest on Normative Loan</b>           | <b>20.99</b>            |
| 8       | Other Finance Charges                       | 3.88                    |
| 9       | <b>Total Interest &amp; Finance Charges</b> | <b>24.87</b>            |

**Commission's Analysis**

The Commission has considered the opening loan as per the closing loan considered in review for FY 2014-15. Addition to loan is considered at 70% of the capitalisation during FY 2015-16. Repayment of loan is considered equivalent to depreciation. The rate of interest is considered as per SBI advance rate (PLR) @14.75% as on 1<sup>st</sup> April 2014 in terms of Regulation 25(2) of the JERC Tariff Regulations, 2009.

The Commission has considered other finance charges at Rs.3.88 Crore as projected by the Petitioner towards bank charges, etc. for FY 2015-16 as considered in the earlier tariff orders.

The Commission has considered the opening loan, additions during the year, normative repayment and accordingly, computed the interest and finance charges for FY 2015-16 as given in the Table below:

**Table 8.48: Interest and finance charges approved for FY 2015-16 (Rs. Crore)**

| Sr. No. | Particulars                                       | Petitioner's submission | Approved for FY 2015-16 |
|---------|---|-------------------------|-------------------------|
| 1       | Opening Normative Loan                            | 118.44                  | 118.44                  |
| 2       | Add: Normative Loan during the Year               | 82.92                   | 82.92                   |
| 3       | Less: Normative Repayment                         | 35.21                   | 35.21                   |
| 4       | <b>Closing Normative Loan (1+2-3)</b>             | <b>166.15</b>           | <b>166.15</b>           |
| 5       | Average Normative Loan (1+4)/2                    | 142.30                  | <b>142.30</b>           |
| 6       | Rate of Interest (@SBAR rate)                     | 14.75%                  | 14.75%                  |
| 7       | <b>Interest on Normative Loan (5*6)</b>           | <b>20.99</b>            | <b>20.99</b>            |
| 8       | Other Finance Charges                             | 3.88                    | 3.88                    |
| 9       | <b>Total Interest &amp; Finance Charges (7+8)</b> | <b>24.87</b>            | <b>24.87</b>            |

### 8.13 Interest on Working Capital

#### **Petitioner's submission:**

As per Regulation 25 of JERC, MYT Regulations, 2014, Interest on Working Capital for retail supply actually shall consist of:

- Receivables for two months
- Less : power purchase cost for one month
- Less: consumer security deposit, but excluding Bank Guarantees and Fixed Deposit.
- Investments for 2 months on annual requirements for the previous years.

The PED has claimed the working capital as 'NIL'. This might be because the consumer security deposit held by the PED is more than the working capital required.

The Commission considers that the working capital requirement of the Petitioner for the Control Period is 'NIL'.

#### **Commission's analysis:**

The Commission, based on the analysis of the cost parameters of ARR approved for FY 2015-16, has observed that there is no working capital requirement after adjustment of security deposit. Hence, interest on working capital is considered 'NIL' for FY 2015-16.

### 8.14 Provisions for Bad Debts

#### **Petitioner's submission:**

As per Clause 32 of MYT Regulations, 2014, deductions based on doubtful debts shall be limited to 1% of the receivables in the True up, subject to the conditions that the amount of bad debts is actually written by the licensee's books of Accounts. The Petitioner has submitted that bad debts shall be claimed in true up on incurring such cost.

#### **Commission's analysis:**

The Regulation 28 of the JERC Tariff Regulations, 2009 specify *"the Commission may after the licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the ARR of the licensee."*

Further, the Petitioner has not claimed any bad debts and accordingly, the Commission has not considered any amount towards bad debts for FY 2015-16.

### 8.15 Interest on Security Deposit

#### Petitioner's Submission

PED has submitted that MYT Regulations, 2014, are silent about claiming of interest on security deposit. However, Clause 29 (b) of the Regulations, under the head "Non-Tariff Income," states that Interest on Security Deposits, in excess of the rate specified by the Commission, shall be considered as Non-Tariff income of the Licensees.

PED feels that there is a contradiction in the clause and the amount has to be claimed under the Interest on Security Deposit and, therefore, PED has claimed interest on security deposit in line with Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The provision of interest on security deposits is to be made at the bank rate and, therefore, the prevailing Bank rate of 9% as notified by Reserve Bank of India with effect from 28<sup>th</sup> January, 2014 is considered. PED submitted that deposit during the year is considered equivalent to the deposits received during FY 2013-14. The Petitioner has computed the interest on security deposit for FY 2015-16 as given in the Table below:

**Table 8.49: Interest on Security Deposit projected for FY 2015-16 (Rs. Crore)**

| Sr. No. | Particulars                         | Petitioner's submission |
|---------|-------------------------------------|-------------------------|
| 1       | Opening Security Deposit            | 151.06                  |
| 2       | Add: Deposits during the Year       | 27.58                   |
| 5       | <b>Closing Security Deposit</b>     | <b>178.64</b>           |
| 6       | <b>Bank Rate</b>                    | 9.00%                   |
| 7       | <b>Interest on Security Deposit</b> | <b>14.84</b>            |

#### Commission's Analysis

The Commission has considered Opening Security Deposit at Rs.151.06 Cr based on the closing security deposit considered in review for FY 2014-15. Addition during the year is considered as projected by the Petitioner. The rate of interest is considered at bank (RBI) rate @ 8.50% as on 06.03.2015.

The Commission in review for FY 2014-15 has approved Rs.12.35 Crore towards interest on security deposit. Out this amount, the Commission has considered Rs.4.00 Crore (estimated to be paid) in FY 2014-15 ARR and balance Rs.8.35 Crore to be carried forward to be provisioned in FY 2015-16. Accordingly, the Commission has considered Rs.8.35 Crore to FY 2015-16 along with the interest on security deposit for FY 2015-16.

The Commission has computed interest on security deposit for FY 2015-16 as given in the Table below:

**Table 8.50: Interest on Security Deposit Approved for FY 2015-16 (Rs. Crore)**

| <b>Sr. No.</b> | <b>Particulars</b>                                    | <b>Petitioner's submission</b> | <b>Approved for FY 2015-16</b> |
|----------------|---|--------------------------------|--------------------------------|
| 1              | Opening Security Deposit                              | 151.06                         | 151.06                         |
| 2              | Add: Deposits during the Year                         | 27.58                          | 27.58                          |
| 3              | <b>Closing Security Deposit</b>                       | <b>178.64</b>                  | <b>178.64</b>                  |
| 4              | <b>Average Security Deposit</b>                       |                                | <b>164.85</b>                  |
| 5              | Rate of interest (Bank Rate)                          | 9.00%                          | 8.50%                          |
| 6              | <b>Interest on Security Deposit</b>                   | <b>14.84</b>                   | <b>14.01</b>                   |
| 7              | Carried forward interest on SD relating to FY 2014-15 |                                | 8.35                           |
| 8              | <b>Total interest on SD considered for FY 2015-16</b> |                                | <b>22.36</b>                   |

In addition to above, the Commission has given directive to the petitioner under para 7.12 of this order that the arrears amount from FY 2009-10 to FY 2013-14 of Rs. 27.63 crore also to be paid by PED during FY 2015-16. As such, the arrear amount of Rs. 27.63 crore on account of interest on security deposit is also considered in ARR for FY 2015-16.

#### **8.16 Return on Capital Base/Net Fixed Assets**

##### **Petitioner's submission:**

The Petitioner has submitted that Regulation 27 of MYT Regulations, 2014, provides for entitlement for Return on Equity. As per the regulations, RoE is allowed @ 16% on 30% of the capital base or actual equity, whichever is lower. However, assets funded by consumer contribution, capital subsidies / grants and corresponding depreciation shall not form part of the capital base.

In line with the Regulation and the methodology proposed in the MYT Regulations, 2014, PED has calculated the Return on Equity, as given in the Table below:

**Table 8.51: Return on Equity projected for FY 2015-16 (Rs. Crore)**

| Sr. No. | Particulars                            | Petitioner's submission |
|---------|--|-------------------------|
| 1       | Gross block of the year                | 730.04                  |
| 2       | Less accumulated depreciation          | 340.71                  |
| 3       | Less accumulated consumer contribution | 9.92                    |
| 4       | <b>Net Capital Base of the year</b>    | <b>379.41</b>           |
| 5       | Equity - 30% of Net Capital Base       | 113.82                  |
| 6       | <b>Return on Equity - 16%</b>          | <b>16.21</b>            |

### **Commission's Analysis**

The Commission has kept the JERC (Multi Year Distribution Tariff) Regulations, 2014 in abeyance and made applicable the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 for the Tariff year FY 2015-16.

Regulation 23(2) of the JERC Tariff Regulations, 2009 provides that in case of an integrated utility, it shall be entitled to Return on its Capital Base as per Schedule VI of the Electricity (Supply) Act, 1948.

EDP being an integrated utility is entitled to Return on Capital Base in terms of Regulation 23(2) of the JERC Tariff Regulations, 2009.

The Commission accordingly, considered Return on Capital Base for FY 2015-16 as given in the Table below:

**Table 8.52: Return on Capital Base approved for FY 2015-16(Rs. Crore)**

| Sl. No. | Particulars   | Approved for 2015-16 |
|---------|---|----------------------|
| 1       | Gross block at the beginning of the year                                    | 611.58               |
| 2       | <b>Less:</b> Accumulated depreciation at the beginning of the year          | 305.49               |
| 3       | <b>Less:</b> Accumulated consumer contribution at the beginning of the year | 9.92                 |
| 4       | Net fixed assets at the beginning of the year (1-2-3)                       | 296.17               |
| 5       | Rate of Return on capital base  | 3.00%                |
| 6       | <b>Reasonable Return (4*5)</b>  | <b>8.89</b>          |

## **8.17 Non Tariff Income**

### **Petitioner's submission**

PED has submitted that the non-Tariff Income comprises of metering, late payment charges, interest on staff loans, and income from trading, reconnection fees. The

PED has considered the non-Tariff Income based on RE for FY 2014-15 which has been escalated by 5% for FY 2015-16.

**Table 8.53: Non-Tariff Income projected for FY 2015-16**  
(Rs. Crore)

| Particulars       | Petitioner's submission |
|-------------------|-------------------------|
| Non Tariff Income | 3.79                    |

**Commission's analysis:**

The Commissions considers the non-tariff income as projected by the Petitioner for FY 2015-16 is reasonable and approves the same as given in the Table below:

**Table 8.54: Non-Tariff Income approved for FY 2015-16**

(Rs. Cr)

| Particulars       | Approved by the Commission for FY 2014-15 (Review) | Petitioner's submission | Approved for FY 2015-16 |
|-------------------|--|-------------------------|-------------------------|
| Non Tariff Income | 3.61   | 3.79                    | 3.79                    |

**8.18 Revenue from Sale of Power at the Existing Tariff**

**Petitioner's submission**

The PED has outlined the Revenue at the existing tariff for FY 2015-16, as outlined below:

**Table 8.55: Revenue at the Existing Tariff for FY 2015-16 proposed**

| S. No. | Category of Consumer                | FY 2015-16     |                     |
|--------|-------------------------------------|----------------|---------------------|
|        |                                     | Sales (MU)     | Revenue (Rs. Crore) |
|        | <b>LT Category</b>                  |                |                     |
| 1      | Domestic & Cottage                  | 652.84         | 159.27              |
| 2      | OHOB                                | 10.00          | 1.07                |
| 3      | Commercial                          | 193.70         | 96.29               |
| 4      | Agriculture                         | 56.60          | 1.81                |
| 5      | Public Lighting                     | 30.61          | 16.47               |
| 6      | LT Industrial including Water Tanks | 289.53         | 130.92              |
| 7      | temporary Supply – LT & HT          | 21.00          | 18.90               |
|        | <b>Total LT</b>                     | <b>1254.28</b> | <b>424.73</b>       |
|        | <b>HT Category</b>                  |                |                     |
| 8      | HT1 -Industrial/Commercial          | 994.33         | 552.52              |
| 9      | HT2 - Government and Water Tanks    | 53.00          | 32.10               |
| 10     | HT3 – EHT                           | 366.30         | 203.76              |
|        | <b>Total HT</b>                     | <b>1413.63</b> | <b>788.37</b>       |
|        | <b>Total from HT &amp; LT</b>       | <b>2667.91</b> | <b>1213.10</b>      |

**Commission's analysis**

The Commission has approved sales of 2700 MU for FY 2015-16. Considering the number of consumers, sales and connected load approved, the Commission has computed the category wise revenue for FY 2015-16 as shown in the table below:

**Table 8.56: Revenue at the Existing Tariff for FY 2015-16 approved by the Commission**

| S. No. | Category of Consumer                | FY 2015-16     |                     |
|--------|-------------------------------------|----------------|---------------------|
|        |                                     | Sales (MU)     | Revenue (Rs. Crore) |
|        | <b>LT Category</b>                  |                |                     |
| 1      | Domestic & Cottage                  | 686.54         | 167.00              |
| 2      | OHOB                                | 10.46          | 1.07                |
| 3      | Commercial                          | 211.00         | 104.46              |
| 4      | Agriculture                         | 57.00          | 1.68                |
| 5      | Public Lighting                     | 29.00          | 15.76               |
| 6      | LT Industrial including Water Tanks | 279.00         | 126.19              |
|        | <b>Total LT</b>                     | <b>1273.00</b> | <b>416.16</b>       |
|        | <b>HT Category</b>                  |                |                     |
| 8      | HT1 -Industrial/Commercial          | 1005.00        | 557.53              |
| 9      | HT2 - Government and Water Tanks    | 55.00          | 33.06               |
| 10     | HT3 – EHT                           | 367.00         | 204.08              |
|        | <b>Total HT</b>                     | <b>1427.00</b> | <b>794.67</b>       |
|        | <b>Total from HT &amp; LT</b>       | <b>2700.00</b> | <b>1210.82</b>      |

**8.19 ARR for FY 2015-16****Petitioner's submission**

The Petitioner has submitted the Aggregate Revenue Requirement (ARR) for FY 2015-16 as given below:

**Table 8.57: Projected ARR for FY 2015-16 (Rs. Crore)**

| Sr. No. | Particulars                           | Petitioner's submission |
|---------|---------------------------------------|-------------------------|
| 1       | Cost of Power Purchase                | 1,108.87                |
| 2       | Employee Costs                        | 80.91                   |
| 3       | R&M Expenses                          | 18.35                   |
| 4       | Administration and General expenses   | 5.76                    |
| 5       | Depreciation                          | 35.21                   |
| 6       | Interest and finance Charges          | 24.87                   |
| 7       | Interest on working capital           | --                      |
| 8       | Return on NFA /Equity                 | 16.21                   |
| 9       | Interest on Consumer Security Deposit | 14.84                   |

| Sr. No. | Particulars   | Petitioner's submission |
|---------|---|-------------------------|
| 10      | <b>Gross Aggregate Revenue Requirement (1 to 9)</b> | <b>1,305.01</b>         |
| 11      | <b>Less: Non-Tariff Income</b>                      | 3.79                    |
| 12      | <b>Net Aggregate Revenue Requirement (10-11)</b>    | <b>1,301.22</b>         |

**Commission's analysis:**

Based on the discussions on the cost parameters in the preceding sections, the Commission approves the Aggregate Revenue Requirement (ARR) for FY 2015-16 as given in the Table below:

**Table 8.58: ARR approved for FY 2015-16 (Rs. Crore)**

| Sr. No. | Particulars  | Petitioner's submission | Approved for FY 2015-16 |
|---------|--|-------------------------|-------------------------|
| 1       | Cost of Power Purchase                                     | 1,108.87                | 1035.63                 |
| 2       | Employee Costs   | 80.91                   | 78.22                   |
| 3       | R&M Expenses   | 18.35                   | 18.35                   |
| 4       | Administration and General expenses                        | 5.76                    | 5.68                    |
| 5       | Depreciation   | 35.21                   | 35.21                   |
| 6       | Interest and finance Charges                               | 24.87                   | 24.87                   |
| 7       | Interest on working capital                                | -                       | -                       |
| 8       | Return on NFA /Equity                                      | 16.21                   | 8.89                    |
| 9       | Interest on Consumer Security Deposit                      | 14.84                   | 22.36                   |
| 10      | Provisions to meet arrears of Interest on Security Deposit |                         | 27.63                   |
| 11      | <b>Gross Aggregate Revenue Requirement (1 to 9)</b>        | <b>1,305.01</b>         | <b>1256.84</b>          |
| 12      | <b>Less: Non-Tariff Income</b>                             | 3.79                    | 3.79                    |
| 13      | <b>Net Aggregate Revenue Requirement (10-11)</b>           | <b>1,301.22</b>         | <b>1253.05</b>          |

**8.20 Revenue Gap for FY 2015-16****Petitioner's Submission**

PED has projected the Revenue, based on projected ARR and estimated Revenue for FY 2015-16, as per existing tariff, as stated above. The ARR estimated Revenue and the Revenue Gap are detailed below:

**Table 8.59: Projected Revenue Gap for FY 2015-16**

| Particulars                           | FY 2015-16 |
|---------------------------------------|------------|
| Aggregate Revenue Requirement         | 1301.22    |
| Revenue from Tariff (Excl. Surcharge) | 1213.10    |
| Revenue Gap/ (Surplus)                | 88.12      |



**Commission's Analysis**

Based on the analysis carried out by the Commission, the considered ARR, the estimated Revenue at the Existing Tariff and the Revenue Gap for the Control Period are detailed below:

**Table 8.60: Approved Revenue Gap for FY 2015-16**

| <b>Particulars</b>                    | <b>FY 2015-16</b> |
|---------------------------------------|-------------------|
| Aggregate Revenue Requirement         | 1253.05           |
| Revenue from Tariff (Excl. Surcharge) | 1210.82           |
| Revenue Gap/ (Surplus)                | 42.23             |

## 9. Tariff philosophy and category-wise tariffs for FY 2015-16

### 9.1 Preamble

The Commission in determining the aggregate revenue requirement and retail supply tariff for the financial year 2015-16 has been guided by the provisions of the Electricity Act, 2003, the Tariff Policy, Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the JERC under Section 61 of the Act which lays down the broad principles, which shall guide the determination of retail tariff.

### 9.2 Tariff Determination

#### Petitioner's submission

The Petitioner submitted that the tariff hike is designed in such a way whereby fixed and energy charges have been increased for each category of consumers at equal rate. For recovery of gap, the PED has proposed 7% hike in fixed charges and 7% hike in energy charges. Further, PED has proposed to recover regulatory asset at an additional surcharge of 5.02% in FY 2015-16. The proposed category-wise tariff for FY 2015-16 are as given in the table below:

**Table 9.1: Summary of existing and proposed tariff rates for FY 2015-16**

| Sl. No      | Category of Consumer          | Existing Tariff for FY 2015-16                           |                       | Proposed Tariff for FY 2015-16                           |                       |
|-------------|-------------------------------|--|-----------------------|--|-----------------------|
|             |                               | Fixed Charge (Rs/kW; Rs/KVA; Rs/HP; Rs/Month/Connection) | Energy Charges Rs/kWh | Fixed Charge (Rs/kW; Rs/KVA; Rs/HP; Rs/Month/Connection) | Energy Charges Rs/kWh |
| <b>1(a)</b> | <b>Domestic &amp; Cottage</b> |  |                       |  |                       |
|             | 1-100                         | 30.00  | 1.05                  | 32.00  | 1.12                  |
|             | 101-200                       | 30.00  | 1.60                  | 32.00  | 1.71                  |
|             | 201-300                       | 30.00  | 3.10                  | 32.00  | 3.32                  |
|             | >300                          | 30.00  | 3.85                  | 32.00  | 4.12                  |
| <b>1(b)</b> | <b>OHOB</b>                   | 25.00  | -                     | 27.00  | -                     |
| <b>2</b>    | <b>Commercial</b>             |  |                       |  |                       |
|             | 0-100                         | 70.00  | 3.85                  | 75.00  | 4.12                  |
|             | 101-250                       | 70.00  | 4.55                  | 75.00  | 4.87                  |
|             | >250                          | 70.00  | 5.00                  | 75.00  | 5.35                  |
| <b>3</b>    | <b>Agriculture</b>            |  |                       |  |                       |

| Sl. No    | Category of Consumer  | Existing Tariff for FY 2015-16                           |                       | Proposed Tariff for FY 2015-16                           |                       |
|-----------|---|--|-----------------------|--|-----------------------|
|           |   | Fixed Charge (Rs/kW: Rs/KVA; Rs/HP; Rs/Month/Connection) | Energy Charges Rs/kWh | Fixed Charge (Rs/kW; Rs/KVA; Rs/HP; Rs/Month/Connection) | Energy Charges Rs/kWh |
|           | Small farmers   | 8.00   |                       | 9.00   |                       |
|           | other farmers   | 25.00  |                       | 27.00  |                       |
| <b>4</b>  | <b>Public Lighting</b>  | 50.00  | 4.40                  | 54.00  | 4.71                  |
| <b>5</b>  | <b>LT Industrial &amp; Water Tanks</b>                                  |  |                       |  |                       |
|           | All Consumption   | 80.00  | 4.50                  | 86.00  | 4.82                  |
| <b>6</b>  | <b>Temporary Supply</b>   |  |                       |  |                       |
| 6(a)      | Light load  | 200.00   | 9.00                  | 214.00   | 9.63                  |
| 6(b)      | Special Illumination  | 500.00   | 9.00                  | 535.00   | 9.63                  |
| 6(c)      | Load exceeding 97kW/130HP   | 500.00   | 9.00                  | 300.00   | 9.63                  |
| <b>7</b>  | <b>Hoardings/Signboards</b>   | 100.00   | 7.00                  | 107.00   | 7.49                  |
| <b>8</b>  | <b>HT-I Industrial &amp; Commercial</b>                                 |  |                       |  |                       |
| 8(a)      | I(a) up to Contracted Maximum Demand (CD) 5000 kVA (Industrial/IT/ITES) | 220.00   | 4.70                  | 235.00   | 5.03                  |
| 8(b)      | I(b) up to Contacted Maximum Demand (CD) 5000 kVA (Commercial)          | 220.00   | 4.70                  | 235.00   | 5.03                  |
| <b>9</b>  | <b>HT-II Government &amp; water tank</b>                                | 220.00   | 4.80                  | 235.00   | 5.14                  |
| <b>10</b> | <b>HT-III EHT (above 5000 KVA)</b>                                      | 240.00   | 4.70                  | 257.00   | 5.03                  |

### **Commission's analysis**

The Commission has determined the retail tariff for FY 2015-16 keeping in view the guiding principles as stated in the Electricity Act, 2003 and Tariff Policy and keeping in view the suggestions/objections of the stakeholders in this regard. Based on the approved Aggregate Revenue Requirement for FY 2015-16 and expected revenue from existing tariff, cumulative gap of Rs. 42.23 Crore has been estimated at the existing tariff.

The Average Cost of Supply (ACoS) approved for FY 2015-16 is Rs. 4.64/kWh and the average revenue realisation at the existing tariff for FY 2015-16 is Rs. 4.48/kWh.

While determining the tariff for FY 2015-16 to be charged from consumers, the Commission has appropriately fixed tariff to ensure that the increase in tariff of the different consumer categories does not cause a tariff shock to them. The Commission has approved an average tariff hike of 4.35%, resulting into additional revenue recovery of Rs.52.69 Crore from the revised tariff. The average revenue realisation with the revised tariff for FY 2015-16 is Rs.4.68/kWh.

The Commission has approved tariff for FY 2015-16 as given below:

**Table 9.2: Tariff approved by the Commission for FY 2015-16**

| Sl. No      | Category of Consumer                    | Approved Tariff FY 2015-16                  |                                   |                           |   |
|-------------|---|---|-----------------------------------|---------------------------|---|
|             |   | Fixed Charge (Rs/month/ connection/ kVA/HP) | Energy/ Variable Charges (Rs/kWh) | Average tariff (Rs./Unit) | "K" Factor for FPPCA formula for FY 2015-16 |
| <b>1(a)</b> | <b>Domestic &amp; Cottage</b>           |   |                                   |                           |   |
|             | 1-100                                   | 32  | 1.10                              | 1.29                      | 0.28  |
|             | 101-200                                 | 32  | 1.65                              | 1.81                      | 0.39  |
|             | 201-300                                 | 32  | 3.25                              | 3.48                      | 0.74  |
|             | >300                                    | 32  | 4.25                              | 4.36                      | 0.93  |
| 1(b)        | OHOB                                    | 27  | 0.00                              | 1.10                      | 0.24  |
| <b>2</b>    | <b>Commercial</b>                       |   |                                   |                           |   |
|             | 0-100                                   | 75  | 4.25                              | 4.46                      | 0.95  |
|             | 101-250                                 | 75  | 4.85                              | 5.10                      | 1.09  |
|             | >250                                    | 75  | 5.25                              | 5.45                      | 1.16  |
| <b>3</b>    | <b>Agriculture</b>                      |   |                                   |                           |   |
|             | Small Farmers                           | 9   | 0.00                              | 0.07                      | 0.02  |
|             | Other Farmers                           | 27  | 0.00                              | 0.36                      | 0.08  |
| <b>4</b>    | <b>Public Lighting</b>                  | <b>54</b>                                   | <b>5.40</b>                       | <b>6.52</b>               | <b>1.39</b>                                 |
| <b>5</b>    | <b>LT Industrial &amp; water Tanks</b>  |   |                                   |                           |   |
|             | All Consumption                         | 86  | 5.10                              | 5.12                      | 1.09  |
| <b>6</b>    | <b>Temporary Supply</b>                 |   |                                   |                           |   |
| 6(a)        | Light load                              | -   | 9.45                              | -                         | -   |
| 6(b)        | Special Illumination                    | -   | 9.45                              | -                         | -   |
| 6(c)        | Load exceeding 97kW/130HP               | -   | 9.45                              | -                         | -   |
| <b>7</b>    | <b>Hoardings/Signboards</b>             | 100   | 7.00                              | -                         | -   |
| <b>8</b>    | <b>HT-I Industrial &amp; Commercial</b> |   |                                   |                           |   |
| 8(a)        | Up to CD 5000 kVA (Industrial/IT/ITES)  | 235   | 4.75                              | 5.62                      | 1.20  |
| 8(b)        | Up to CD 5000 kVA (Commercial)          | 235   | 4.75                              | 6.33                      | 1.35  |
| <b>9</b>    | <b>HT-II Government &amp;</b>           | 235   | 5.50                              | 6.79                      | 1.45  |

| Sl. No | Category of Consumer        | Approved Tariff FY 2015-16                  |                                   |                           |   |
|--------|-----------------------------|---|-----------------------------------|---------------------------|---|
|        |                             | Fixed Charge (Rs/month/ connection/ kVA/HP) | Energy/ Variable Charges (Rs/kWh) | Average tariff (Rs./Unit) | "K" Factor for FPPCA formula for FY 2015-16 |
|        | water tank                  |   |                                   |                           |   |
| 10     | HT-III EHT (above 5000 KVA) | 220   | 4.75                              | 5.54                      | 1.18  |

### 9.3 Average Cost of Supply (ACoS)

The ACoS as approved for FY 2014-15 as per the Tariff Order dated April 25, 2014, was Rs. 4.50/kWh. The ACoS arrived for FY 2015-16 is Rs. 4.64/kWh.

The Commission observes that tariff being charged to many of the categories of consumers are below the average cost of supply. With the progressive increase in the tariff of the subsidised categories towards ACoS, the tariff may over the years touch ACoS and the existing gap of the cross subsidy may progressively narrow down. The Average Billing Tariff as a percentage of Average Cost of Supply (Rs.4.64/kWh) approved in this Tariff Order for FY 2015-16 is shown in the Table below. A comparative chart is given below to show the approved Tariff as a percentage of ACoS of respective years for FY 2015-16 and FY 2014-15.

**Table 9.3 Approved Tariff as a percentage of ACoS for FY 2015-16**

| Category                       | Approved Tariff for FY 2015-16        |                        | Approved in tariff for FY 2014-15 (order dated April 25, 2014) |                        |
|--------------------------------|---------------------------------------|------------------------|--|------------------------|
|                                | Avg. Revenue Realisation (FY 2015-16) | % of ACoS (FY 2015-16) | Avg. Revenue Realisation (FY 2014-15)                          | % of ACoS (FY 2014-15) |
| Domestic excluding OHOB        | 2.61                                  | 56%                    | 2.77   | 62%                    |
| Commercial                     | 5.25                                  | 113%                   | 4.98   | 111%                   |
| Agriculture                    | 0.32                                  | 7%                     | 0.30   | 7%                     |
| Public Lighting                | 6.52                                  | 140%                   | 5.42   | 120%                   |
| LT Industrial                  | 5.12                                  | 110%                   | 4.52   | 101%                   |
| HT-I Industrial and Commercial | 5.65                                  | 122%                   | 5.40   | 120%                   |
| HT-II Govt. and Water Tank     | 6.79                                  | 146%                   | 5.55   | 123%                   |
| HT-III EHT                     | 5.54                                  | 119%                   | 5.37   | 119%                   |

#### 9.4 Applicability of revised tariffs

The revised tariffs shall be applicable from 1<sup>st</sup> April, 2015.

In cases, where there is a billing cycle difference for a consumer with respect to the date of applicability of the revised tariffs, then the revised tariff should be made applicable on a pro-rata basis for the consumption. The bills for the respective periods as per existing tariff 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).

#### 9.5 Revenue at approved tariff for FY 2015-16

The approved tariff shall be effective from 1<sup>st</sup> April 2015 and shall remain valid till revised through a separate order. The revenue at approved tariff for FY 2015-16 for the various consumer categories is as below:

**Table 9.4: Revenue at approved tariff approved by the Commission for FY 2015-16**

| Category                       | Total Revenue (Rs. Crore) |
|--------------------------------|---------------------------|
| Domestic                       | 180.51                    |
| Commercial                     | 110.67                    |
| Agriculture                    | 1.81                      |
| Public Lighting                | 18.90                     |
| LT Industrial                  | 142.87                    |
| HT-1 Industrial and Commercial | 568.06                    |
| HT-2 Govt. and Water Tank      | 37.34                     |
| HT-3 EHT                       | 203.35                    |
| <b>Total</b>                   | <b>1263.51</b>            |

**Table 9.5: Revenue Deficit at approved tariff by the Commission for FY 2015-16 (Other than Regulatory assets)**

| Sl. No. | Particulars   | Approved (Rs. Crore) |
|---------|---|----------------------|
| 1       | ARR for FY 2015-16  | 1253.05              |
| 2       | Revenue from existing tariff  | 1210.82              |
| 3       | Revenue Gap/(Surplus) for the year at existing tariff                                 | 42.23                |
| 4       | Gap/(Surplus) for FY 2014-15 Review as assessed in this Tariff Order                  | (21.33)              |
| 5       | <b>Add: Gap for FY 2013-14 (Review) as per T.O. dated 25<sup>th</sup> April, 2014</b> | <b>42.62</b>         |
| 6       | <b>Less: Additional revenue from revised tariff</b>                                   | <b>52.69</b>         |
| 7       | Cumulative gap at approved tariff as at the end of FY 2015-16                         | <b>10.83</b>         |

## 9.6 Treatment of Regulatory Assets

The Commission has finalised the balance regulatory assets as at the end of FY 2014-15 at Rs. 33.32 Crore (Table 7.34 of this Tariff Order). The balance amount of Rs. 33.32 Crore is to be liquidated during FY 2015-16. The revenue as approved for FY 2015-16 at revised tariff is Rs. 1263.51 Crore. The Commission approves a surcharge of 2.64% to be levied to all consumers at the fixed tariff rates. However, the agriculture and OHOB category of consumers would be excluded from the levy of this surcharge.

## 10. Determination of Open Access Charges

### Petitioner's submission

#### (1) Allocation of ARR between Wire Business and Retail supply

The Petitioner has submitted the allocation between the wire business and retail supply for FY 2015-16 based on certain assumptions as given in the table below:

**Table 10.1: Allocation of ARR between Wire Business and Retail Supply**

| Sl. No | Item of Expense                        | Wire Business (%) | Supply Business (%) | FY 2015-16             |                          |                       |
|--------|--|-------------------|---------------------|------------------------|--------------------------|-----------------------|
|        |  |                   |                     | Wire Business (Rs. Cr) | Supply Business (Rs. Cr) | Total Amount (Rs. Cr) |
| 1.     | Cost of Power Purchase                 | 0%                | 100%                |                        | 1108.87                  | 1108.87               |
| 2.     | Employee Cost                          | 75%               | 25%                 | 60.68                  | 20.23                    | 80.91                 |
| 3.     | R&M Expenses                           | 90%               | 10%                 | 16.51                  | 1.83                     | 18.35                 |
| 4.     | Administration and General Expenses    | 60%               | 40%                 | 3.45                   | 2.30                     | 5.76                  |
| 5.     | Depreciation                           | 90%               | 10%                 | 31.69                  | 3.52                     | 35.21                 |
| 6.     | Interest and Financial charges         | 90%               | 10%                 | 22.38                  | 2.49                     | 24.87                 |
| 7.     | Interest on Working Capital            | 22%               | 78%                 |                        |                          |                       |
| 8.     | Return on NFA/Equity                   | 90%               | 10%                 | 14.59                  | 1.62                     | 16.21                 |
| 9.     | Provision for Bad Debt                 | 0%                | 100%                |                        |                          |                       |
| 10.    | Interest on Consumer Security Deposit  | 0%                | 100%                |                        | 14.84                    | 14.84                 |
| 11.    | <b>Total Revenue Requirement</b>       |                   |                     | <b>149.31</b>          | <b>1155.70</b>           | <b>1305.01</b>        |
| 12.    | Less: Non Tariff Income                | 0%                | 100%                |                        | 3.79                     | 3.79                  |
| 13.    | <b>Net Revenue Requirement(11-12)</b>  |                   |                     | <b>149.31</b>          | <b>1151.91</b>           | <b>1301.22</b>        |
| 14.    | <b>Energy Sales (MU)</b>               |                   |                     | <b>2667.91</b>         | <b>2667.91</b>           | <b>2667.91</b>        |
| 15.    | <b>Average Cost of Supply (Rs/kWh)</b> |                   |                     | <b>0.56</b>            | <b>4.32</b>              | <b>4.88</b>           |

The Petitioner has also submitted that the percentage allocation for segregation of Retail supply and wire business expenses is purely on the basis of assumptions and cannot be treated as basis for any accounting purposes and this segregation is only for the purpose of determination of aggregate revenue requirement for the purpose of petitions submitted.

#### (2) Voltage-wise Wheeling Charges

The Petitioner has submitted that the voltage wise loss levels have been taken as approved by the Commission in the Tariff Order for FY 2014-15. The table depicting the same is shown below:



Table 10.2: Voltage-wise loss

| Voltage Level  | Loss   |
|----------------|--------|
| EHT            | 1.00%  |
| HT-33/22/11 kV | 5.00%  |
| LT             | 13.90% |
| Total          | 12.00% |

The Wheeling charges calculation is provided in the table below:

Table 10.3: Wheeling Charges for FY 2015-16

| Sl. No | Particulars                         | UoM              | Formula                      | FY 2015-16    |
|--------|-------------------------------------|------------------|------------------------------|---------------|
| 1      | Wheeling Cost                       | Rs. Cr           | a                            | 149.31        |
| 2      | Wheeling Cost at EHT                | Rs. Cr           | $b=a*49\%$                   | 73.16         |
| 3      | Wheeling Cost at HT                 | Rs. Cr           | $c=a*9\%$                    | 13.44         |
| 4      | Wheeling Cost at LT                 | Rs. Cr           | $d=a*42\%$                   | 62.71         |
| 5      | Energy Input at Discom Periphery    | MU               | e                            | 3023.13       |
| 6      | <b>Wheeling Charge at EHT Level</b> | <b>(Rs./kWh)</b> | <b><math>f=b/e*10</math></b> | <b>0.24</b>   |
| 7      | EHT Losses                          | %                | g                            | 1.00%         |
| 8      | EHT Losses                          | MU               | h                            | 30.23         |
| 9      | Sales at EHT Level                  | MU               | i                            | 366.30        |
| 10     | Energy Input at HT                  | MU               | $j=e-h-i$                    | 2626.59       |
| 11     | <b>Wheeling Charge at HT Level</b>  | Rs/Unit          | $k=c/j*10$                   | 0.05          |
| 12     | HT Losses                           | %                | l                            | 5.00%         |
| 13     | HT Losses                           | MU               | m                            | 131.33        |
| 14     | Sales at HT Level                   | MU               | n                            | 1047.33       |
| 15     | Energy Input at LT                  | MU               | $o=j-m-n$                    | 1447.93       |
| 16     | <b>Wheeling Charge at LT Level</b>  | Rs/Unit          | <b><math>p=d/o*10</math></b> | <b>0.43</b>   |
| 17     | Sales at LT Level                   | MU               | q                            | 1254.28       |
| 18     | LT Losses                           | MU               | $r=o-q$                      | 193.66        |
| 19     | LT Losses                           | %                | %                            | 13.40%        |
| 20     | <b>Total Losses</b>                 | <b>MU</b>        | <b><math>s=r+m+h</math></b>  | <b>355.22</b> |
|        |                                     | <b>%</b>         |                              | <b>11.75%</b> |

The Petitioner further submitted that the wheeling cost has been considered in the ratio of 49:9:42 between EHT, HT and LT as considered in the last Tariff Order dated April 25, 2014.

### (3) Cross-subsidy surcharge

The Petitioner has submitted that the cross subsidy surcharge is based on the formula as per Tariff Policy as given below:

$$S = T - [C (1+L/100) + D]$$

Where,

S is surcharge

T is Tariff payable by relevant category of consumers

C is weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power

D is wheeling charges

L is the system loss for the applicable voltage level

#### (a) Computation of Cross Subsidy Surcharge (CSS)

The Petitioner has submitted that the Transmission and Distribution business has not yet been segregated and it continues to function as an integrated utility. Since, the expenses of the utility are consolidated and have therefore considered the transmission charges as “Nil” for open access consumers in the UT.

##### (i) Computation of “C”

Table 10.4: Calculation of ‘C’ based on ARR for FY 2015-16

| Particulars                 | Station               | Energy Procured (MU) | Avg. Rate (Rs./kWh) | Total Power Purchase Cost (Rs. Crore) |
|-----------------------------|-----------------------|----------------------|---------------------|---------------------------------------|
| 5% of the power procurement | Tuticorin NLC project | 64.47                | 3.83                | 24.71                                 |
|                             | NLC TPS-II Stage-1    | 93.77                | 3.60                | 33.73                                 |
| <b>Total</b>                |                       | <b>158.24</b>        | <b>3.69</b>         | <b>58.44</b>                          |

##### (ii) Computation of CSS

Table 10.5: Calculation of ‘C’ based on ARR for FY 2015-16

| Particulars            | Sales (MU) | Revenue from existing tariff (Rs. Cr) | Average Tariff T (Rs./kWh) | Cost of Power C (Rs./kWh) | Wheeling Charges D (Rs./kWh) | Loss L (%) | Cross Subsidy Surcharge (Rs/kWh) |
|------------------------|------------|---------------------------------------|----------------------------|---------------------------|------------------------------|------------|----------------------------------|
| HT-1 Industrial        | 994.33     | 618.82                                | 6.22                       | 3.69                      | 0.05                         | 5.00%      | 2.29                             |
| HT-2 Govt & water tank | 53.00      | 34.33                                 | 6.48                       | 3.69                      | 0.05                         | 5.00%      | 2.55                             |
| HT-3 EHT               | 366.30     | 218.04                                | 5.95                       | 3.69                      | 0.24                         | 1.00%      | 1.98                             |

#### (4) Additional Surcharge

The Petitioner has submitted that it will approach the Commission separately on case to case basis seeking approval for ‘Additional Surcharge’

**Commission's Analysis:**

The Commission in order to facilitate open access has approved the open access charges for FY 2015-16.

It is seen from the Petitioner's Submission that the transmission and distribution business has not been segregated and EDP continues to function as an integrated utility. The Commission has considered the fact that the expenses of the utility are consolidated and has therefore considered transmission charges as 'NIL' for open access consumers in the UT.

**Allocation Matrix:**

The Commission feels that there has to be proper bifurcation of all expenses pertaining to the Petitioner between functions of wheeling business (wire business) and retail supply business. The Commission has considered it prudent to consider the allocation matrix for bifurcation of wheeling and retail ARR as proposed in the "STAFF PAPER ON OPERATIONALISATION OF OPEN ACCESS (OA) IN THE STATE OF GOA AND THE UT'S in September 2012. The allocation between wheeling and retail supply business for FY 2015-16 as per the ARR approved in this order is provided in the Table below:

**Table 10.6: Allocation of ARR between Wheeling and Retail Supply for FY 2015-16**

| Sl. No | Particulars   | Wire Business (%) | Supply Business (%) | FY 2015-16             |                          |                       |
|--------|---|-------------------|---------------------|------------------------|--------------------------|-----------------------|
|        |   |                   |                     | Wire Business (Rs. Cr) | Supply Business (Rs. Cr) | Total Amount (Rs. Cr) |
| 1      | Cost of Power Purchase                                    | 0%                | 100%                | 0.00                   | 1035.63                  | 1035.63               |
| 2      | Employee Cost   | 70%               | 30%                 | 54.75                  | 23.47                    | 78.22                 |
| 3      | R&M Expenses  | 90%               | 10%                 | 16.52                  | 1.84                     | 18.35                 |
| 4      | Administration and General Expenses                       | 50%               | 50%                 | 2.84                   | 2.84                     | 5.68                  |
| 5      | Depreciation  | 90%               | 10%                 | 31.69                  | 3.52                     | 35.21                 |
| 6      | Interest and Financial charges                            | 90%               | 10%                 | 22.38                  | 2.49                     | 24.87                 |
| 7      | Interest on Consumer Security Deposit                     | 0%                | 100%                | 0.00                   | 22.36                    | 22.36                 |
| 8      | Provision to meet arrears of interest on security deposit | 0%                | 100%                | 0.00                   | 27.63                    | 27.63                 |
| 9      | Interest on Working Capital                               | 22%               | 78%                 | 0.00                   | 0.00                     | 0.00                  |
| 10     | Return on NFA/Equity                                      | 90%               | 10%                 | 8.00                   | 0.89                     | 8.89                  |
| 11     | Provision for Bad Debt                                    | 0%                | 100%                | 0.00                   | 0.00                     | 0.00                  |
| 12     | <b>Total Revenue Requirement</b>                          |                   |                     | <b>136.18</b>          | <b>1120.66</b>           | <b>1256.84</b>        |
| 13     | Less: Non Tariff Income                                   | 0%                | 100%                | 0.00                   | 3.79                     | 3.79                  |

| Sl. No | Particulars                            | Wire Business (%) | Supply Business (%) | FY 2015-16             |                          |                       |
|--------|--|-------------------|---------------------|------------------------|--------------------------|-----------------------|
|        |  |                   |                     | Wire Business (Rs. Cr) | Supply Business (Rs. Cr) | Total Amount (Rs. Cr) |
| 14     | <b>Net Revenue Requirement (12-13)</b> |                   |                     | <b>136.18</b>          | <b>1116.87</b>           | <b>1253.05</b>        |
| 15     | Energy Sales (MU)                      |                   |                     |                        |                          | 2700.00               |
| 16     | <b>Average Cost of Supply (Rs/kWh)</b> |                   |                     |                        |                          | <b>4.64</b>           |

#### **Voltage wise Wheeling Charges**

The Petitioner has submitted that the voltage wise bifurcation of expenses and assets are not available. The Commission opines that in the absence of the details of bifurcation of assets and expenses the open access should not be restricted due to lack of information. The Commission in this regard would like to mention that the apportionment of wheeling charges has to account for losses. Therefore in the absence of the voltage wise details, the Commission has considered the bifurcation of wheeling cost based on the sales and losses at each voltage level.

The Commission has considered the losses at EHT and HT same as approved in the last tariff order dated 25<sup>th</sup> April, 2014. Accordingly the Commission has considered the losses at HT and EHT at 5% and 1% respectively. The loss for FY 2015-16 has been approved by the Commission at 11.75% in this order. Accordingly, balance loss has been considered at the LT level, as shown in the table below:

| <b>Voltage Level</b> | <b>Loss</b>   |
|----------------------|---------------|
| EHT                  | 1.00%         |
| HT-33/22/11          | 5.00%         |
| LT                   | 13.30%        |
| <b>Total</b>         | <b>11.75%</b> |

The apportionment of the wheeling cost has been considered in the ratio of 49:9:42 between EHT, HT and LT respectively (as considered in the last tariff order dated 25<sup>th</sup> April, 2014). The apportionment of the wheeling cost has been considered in the same ratio. The wheeling charge so arrived has been shown in the table below:

**Table 10.7: Wheeling Charges approved from FY 2015-16**

| <b>Sl. No</b> | <b>Particulars</b>   | <b>UoM</b> | <b>Formula</b> | <b>FY 2015-16</b> |
|---------------|----------------------|------------|----------------|-------------------|
| 1             | Wheeling Cost        | Rs. Cr     | a              | 136.18            |
| 2             | Wheeling Cost at EHT | Rs. Cr     | b=a*49%        | 66.73             |
| 3             | Wheeling Cost at HT  | Rs. Cr     | c=a*9%         | 12.26             |
| 4             | Wheeling Cost at LT  | Rs. Cr     | d=a*42%        | 57.20             |

| Sl. No | Particulars                         | UoM              | Formula         | FY 2015-16    |
|--------|-------------------------------------|------------------|-----------------|---------------|
| 5      | Energy Input at Discom Periphery    | MU               | e               | 3059          |
| 6      | <b>Wheeling Charge at EHT Level</b> | <b>(Rs./kWh)</b> | <b>f=b/e*10</b> | <b>0.22</b>   |
| 7      | EHT Losses                          | %                | g               | 1.00%         |
| 8      | EHT Losses                          | MU               | h               | 30.59         |
| 9      | Sales at EHT Level                  | MU               | i               | 367.00        |
| 10     | Energy Input at HT                  | MU               | j=e-h-i         | 2661.41       |
| 11     | <b>Wheeling Charge at HT Level</b>  | <b>Rs/Unit</b>   | <b>k=c/j*10</b> | <b>0.05</b>   |
| 12     | HT Losses                           | %                | l               | 5.00%         |
| 13     | HT Losses                           | MU               | m               | 133.07        |
| 14     | Sales at HT Level                   | MU               | n               | 1060          |
| 15     | Energy Input at LT                  | MU               | o=j-m-n         | 1468.34       |
| 16     | <b>Wheeling Charge at LT Level</b>  | <b>Rs/Unit</b>   | <b>p=d/o*10</b> | <b>0.39</b>   |
| 17     | Sales at LT Level                   | MU               | q               | 1273          |
| 18     | LT Losses                           | MU               | r=o-q           | 195.34        |
| 19     | LT Losses                           | %                | %               | 13.30%        |
| 20     | <b>Total Losses</b>                 | <b>MU</b>        | <b>s=r+m+h</b>  | <b>359.00</b> |
|        |                                     | <b>%</b>         |                 | <b>11.75%</b> |

### Cross Subsidy Surcharge

The Cross subsidy surcharge is based on the following formula given in the tariff policy as below:

$$S = T - [C(1+L/100) + D]$$

Where,

**S** is 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 fuel based generation and renewable power;

**D** is the Wheeling charges;

**L** is the system losses for the applicable voltage level, expressed as percentage.

The computation of each item is given below.

**Table 10.8: Calculation of "T"**

| Particulars            | Sales (MU) | Revenue from approved tariff (Rs. Crore) | Average Tariff (T) (Rs./kWh) |
|------------------------|------------|--|------------------------------|
| HT 1 Industrial        | 1005       | 568.06                                   | 5.65                         |
| HT 2 Govt & water tank | 55         | 37.34                                    | 6.79                         |
| HT 3 EHT               | 367        | 203.35                                   | 5.54                         |

Table 10.9: Calculation of “C”

| Station                             | Energy Procured (MU) | Avg. Rate (Rs./kWh) | Total Power Purchase Cost (Rs. Crore) |
|-------------------------------------|----------------------|---------------------|---------------------------------------|
| Tuticorin NLC project               | 71.00                | 3.55                | 25.21                                 |
| NLC-TPS-I (Expn.)                   | 89.10                | 3.50                | 31.19                                 |
| <b>Total (5% of Power Purchase)</b> | <b>160.10</b>        |                     | <b>56.40</b>                          |
| <b>Weighted Average Cost</b>        |                      |                     | <b>3.52</b>                           |

The cross subsidy surcharge based on the above formula is worked out in the table below:

Table 10.10: Approved Cross Subsidy Surcharge for FY 2015-16

| Particulars      | UoM        | HT 1        | HT 2        | EHT         |
|------------------|------------|-------------|-------------|-------------|
| T                | Rs Per kWh | 5.65        | 6.79        | 5.54        |
| C                | Rs Per kWh | 3.52        | 3.52        | 3.52        |
| D                | Rs Per kWh | 0.05        | 0.05        | 0.22        |
| L                | %          | 5.00        | 5.00        | 1.00        |
| <b>Surcharge</b> | Rs Per kWh | <b>1.90</b> | <b>3.04</b> | <b>1.76</b> |

The surcharge has been calculated for HT and EHT category only as presently the open access is allowed to 1 MW and above consumers only which fall under this category.

#### **Additional Surcharge:**

In order to promote competition through open access the Commission in line with the Petitioner’s submission approved “Nil” Additional Surcharge. This would be revised at the time of next tariff order based on Open Access implementation.

## 11. Directives

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### **Directive 1: Annual Statement of Accounts**

#### **Commission's Observation made in the Tariff Order FY 2014-15**

It is observed that the final audited accounts for FY 2011-12 and FY 2012-13 have not been submitted before the Commission. The final true-up of FY 2011-12 and FY 2012-13 is also pending for want of audited accounts. The Commission directs the Petitioner to prepare the audited accounts for FY 2011-12 and FY 2012-13 and file true-up based on these. The Petitioner is directed to expedite the process in order to arrive at the correct revenue gap for the utility and avoid accumulation of losses.

#### **Compliance by the Electricity Department, Puducherry**

Audit of FY 2011-12 & FY 2012-13 has been completed and the same has been furnished for Truing up of FY 2011-12 & FY 2012-13 respectively along with this petition. Unaudited accounts have been prepared and the same are attached for provisional true up of FY 2013-14. Audit of accounts for FY 2013-14 is expected to be completed by February 2015 and the same will be furnished to the Commission immediately. Hence, it is prayed that the directive may be dropped.

#### **Comments of the Commission**

The filing of Final True up for FY 2011-12 and FY 2012-13 is noted. The audited accounts for FY 2013-14 shall be expedited and submitted along with True up Petition for FY 2013-14 by June 2015.

### **Directive 2: Preparation of Asset and Depreciation Register**

#### **Commission's Observation made in the Tariff Order FY 2014-15**

The submission of the Fixed Asset Register (FAR) for FY 2009-10 and FY 2010-11 has been noted. The Petitioner is required to prepare the FAR along with the audited accounts and submit the same along with the true-up petition of the respective year. Separate directions for each true-up year would not be issued and the FAR is required to be submitted before the Commission along with the true-up petition of the respective year.

**Compliance by the Electricity Department, Puducherry**

Asset and Depreciation Registers have been prepared for the FY 2011-12, FY 2012-13 & FY 2013-14. Audit of accounts along with Asset and Depreciation Registers for the FY 2011-12 & FY 2012-13 has been completed. Audit of FY 2013-14 is awaited. Hence, it is prayed that the directive may be dropped.

**Comments of the Commission**

Compliance is noted. The Fixed Asset Registrar for FY 2013-14 may be submitted along with True up Petition for FY 2013-14.

**Directive 3: Accounting of security deposits etc. under appropriate head of accounts**

**Commission's Observation made in the Tariff Order FY 2014-15**

The efforts of the Petitioner in this regard have been noted. For LT consumers, the process of payment of interest on security deposit should be expedited. Further, the Petitioner is directed to provide the split up of the consumer security deposit amount into bank guarantee, fixed deposit and cash forms for analysis during the true-up of the respective year. The Commission further directs the Petitioner to pay interest on security deposit for FY 2009-10, FY 2010-11, FY 2011-12, FY 2012-13 and FY 2013-14 and submit the status report by June 30' 2014 failing which the Commission would be constrained to initiate action u/s 142 of Electricity Act 2003.

**Compliance by the Electricity Department, Puducherry**

In the case of HT consumers the payment of interest on security deposits has been made for the year FY 2012-13, FY 2013-14 and FY 2014-15. For LT consumers interest on security deposits has been paid to Town O & M Division of Puducherry and to Mahe Region. With respect to Yanam region, the sanction of the Government for payment of interest on security deposit for FY 2012-13 & FY 2013-14 is under process.



### **Comments of the Commission**

The compliance on payment of interest on security deposits is noted. The sanction of the Government for payment of interest on security deposit for LT consumers, Yanam region for FY 2012-13 and FY 2013-14 may be obtained early and payment released. The sanction for payment of security deposit for FY 2014-15 may also be obtained early and payment released to the consumers. It is seen that though the Commission has approved and included a provision of Rs. 39.98 Crore in the ARR covering the payment for FY 2009-10 to FY 2014-15, the PED has not taken serious steps for payment/credit to the consumers concerned. A paltry amount of only Rs. 4 Crore is provided in FY 2014-15 (RE) by the PED. The Commission reiterates the earlier directive for early payment/credit to consumers to liquidate the entire arrears by FY 2015-16 itself.

### **Directive 4: Energy Audit and T&D Losses**

#### **Commission's Observation made in the Tariff Order FY 2014-15**

The Commission appreciates the efforts made by the licensee towards compliance of the Commission's directive. Quarterly progress report on the status of the above compliance should be submitted to the Commission and the implementation of the mentioned programs by the licensee should be completed. RAPDRP implementation should be expedited and DTR implementation as stated above should be carried out.

### **Compliance by the Electricity Department, Puducherry**

At present, meters are available at the voltage levels of 220 KV, 110 KV, 22 KV and 11 KV in all the EHT sub stations. The sanction of the Government has been received for providing metering arrangements for 1220 No's. of distribution transformers. The work order for the same is proposed to be issued shortly. The required energy meters have already been purchased. In case of Karaikal region energy meters have been fixed in 24 number of distribution transformers.

### **Comments of the Commission**

Compliance is noted. Providing of metering arrangements for 1220 No's distribution transformers should be expedited as the meters are already obtained. The time

schedule for providing meters at distribution transformers should be furnished by 15<sup>th</sup> June, 2015.

**Directive 5: Estimation of the consumption by agriculture pump-sets**

**Commission's Observation made in the Tariff Order FY 2014-15**

The efforts of the licensee in this regard are noted. However, the results of the sampling exercise have still not been submitted before the Commission. The pending compliance should be ensured and the results presented before the Commission. This would help in assessing the true consumption of the agriculture category and presenting an accurate analysis before the Commission.

**Compliance by the Electricity Department, Puducherry**

As directed by the Commission, the PED has taken initiatives to provide meters at the distribution transformers feeding power supply predominantly to the agriculture consumers and assess the actual energy consumption per HP of agriculture consumers. 97 energy meters have been fixed and analysis is being undertaken by the Department.

**Comments of the Commission**

The consumption observed on the meters provided at distribution transformer feeding agricultural consumers and the actual consumption assessed per HP based on the meters provided so far may be furnished to the Commission by June, 2015. Metering of balance transformers should be expedited and road map for providing meters on all transformers should be furnished by June, 2015.

**Directive 6: Management Information System**

**Commission's Observation made in the Tariff Order FY 2014-15**

The status report on the compliance of the above directive and progress of implementation of the MIS in the Department should be submitted to the Commission by September 30 of 2014.

**Compliance by the Electricity Department, Puducherry**

Government of India has extended the last date for completion of Part – A, R-APDRP

Scheme up to March 2015. After completion of the R-APDRP Scheme the necessary MIS inputs will be submitted to the Commission.

#### **Comments of the Commission**

The PED is directed to report the timeline for completion of the APDRP Scheme to the Commission by 30<sup>th</sup> June, 2015.

#### **Directive 7: Metering of consumer installations/replacement of non-functional or defective Meters**

##### **Commission's Observation made in the Tariff Order FY 2014-15**

The efforts of the Petitioner are appreciated. The status report on the compliance of the above directive should be submitted before the Commission by September 30' 2014. The pending task of the replacement of the remaining meters should be completed.

#### **Compliance by the Electricity Department, Puducherry**

Regarding replacement of non-functional and defective meters, the department has procured 50,000 numbers of single phase energy meters and 9,000 numbers of three phase energy meters for this purpose. Out of 50,000 meters, 45,500 have already been allotted to different sections for replacement of defective/struck up meters. The replacement of struck up meters have been carried out under war footing basis.

During H1 of FY 2014-15, 8548 numbers of meters were replaced. Further, the Department proposes to place orders for purchase of 22,000 & 10,000 numbers of single phase & three phase electronic meters at a cost of Rs.2.5 Crore. It is further programmed to procure under RAPDRP scheme 30,000 & 12,000 numbers of single phase & three phase electronic meters with AMR compatibility for Rs 8 Crore.

#### **Comments of the Commission**

Action taken by PED on the compliance of the directive is noted. PED is directed to submit the present status of replacement of defective meters etc., with meters already available, the additional meters proposed to be ordered and timeline for receipt of the additional meters. PED is directed to report time schedule for

replacement of defective meters as on 31.03.2015. The report must be submitted by 30<sup>th</sup> June, 2015.

**Directive 8: Billing and Collection Efficiency**

**Commission's Observation made in the Tariff Order FY 2014-15**

The Commission understands that efforts are being made by the Petitioner in this regard; however, Metering, Billing and Collection (MBC) module is yet to be implemented. The status report should be submitted before the Commission by September 30' 2014. Further, RAPDRP should be implemented as improvement of billing and collection is linked to the implementation of the RAPDRP programme.

**Compliance by the Electricity Department, Puducherry**

Government of India has extended the last date for completion of Part – A, R-APDRP Scheme up to March 2015. After completion of the R-APDRP Scheme the billing and collection efficiency will drastically improve. On completion of the above work necessary report will be submitted to the Commission.

**Comments of the Commission**

The PED is directed to report the present status of Billing and Collection efficiency and the improvement expected on completion of R-APDRP Scheme which is expected to be completed by March, 2015. The report should be submitted by 30<sup>th</sup> June, 2015.

**Directive 9: Collection of arrears**

**Commission's Observation made in the Tariff Order FY 2014-15**

The status report on the liquidation plan should be submitted before the Commission by June 30' 2014. The process of collection of arrears should be expedited.

**Compliance by the Electricity Department Puducherry**

Arrears to the tune of Rs. 80 Crore have been collected from the consumers up to June '2014. The Department has initiated special drive to collect outstanding arrears both from Government and private sectors. The respective Head of the Departments

have been addressed to pay special attention to clear arrears. The Government of Puducherry is releasing an amount of Rs. 100 Crore for liquidating the arrears of all public sector undertakings and Government Departments.

**Comments of the Commission**

Compliance is noted. The PED is directed to collect the arrears from the Government Departments, public undertakings and private consumers and submit quarterly reports on the Realisation of the arrears.

**Directive 10: Load Shedding and ensuring proper service to the consumers**

**Commission's Observation made in the Tariff Order FY 2014-15**

The submission of the Petitioner is noted. The status report on the compliance of the directive should be submitted to the Commission by September 30' 2014.

**Compliance by the Electricity Department Puducherry**

Sanction of the Government has been obtained for Man power employment for Customer Care Centre. IT implementing Agency is about to set up the Customer Care Centre.

**Comments of the Commission**

Action taken is noted. The PED is directed to report the present status and the target date for setting up of the full-fledged Centre to provide better service to consumers. Details of Load shedding has to be informed to the consumers in advance through newspapers etc. The report should be submitted to the Commission by 30<sup>th</sup> June, 2015.

**Directive 11: Demand Side Management and Energy Conservation**

**Commission's Observation made in the Tariff Order FY 2014-15**

The efforts of the Petitioner are appreciated. The study report on demand side management and energy conservation should be submitted before the next ARR & tariff filing.

**Compliance by the Electricity Department Puducherry**

As a part of demand side management with the approval of the Hon'ble commission,

the Electricity Department, Puducherry is implementing the scheme namely Demand side management Energy Efficient Lighting Programme (DELP). EESL has so far distributed about 6.00 Lakhs numbers of 7 W LED bulbs for the households in the all the regions of Puducherry for replacement of 60 W ICL. Further Department has submitted a proposal to the government for constituting DSM cell in accordance with DSM Regulations of the Hon'ble Commission.

The Government of Puducherry is also planning to replace the existing street lights with LED fittings. Under pilot project, so far 250 numbers of LED streetlights have been provided. The Government of Puducherry had constituted a high level committee for further examination. On finalisation of scheme, detailed report will be submitted to Hon'ble Commission.

#### **Comments of the Commission**

The action taken is noted. The PED is directed to report the energy savings obtained by implementation of the measures taken so far. The PED is also directed to report on further action being taken on implementation of Demand side management and on the impact of the measures. The status report may be submitted by 30<sup>th</sup> June, 2015.

#### **Directive 12: Pilferage of Energy**

##### **Commission's Observation made in the Tariff Order FY 2014-15**

Submission is noted. Quarterly progress reports on the status of the functioning of the enforcement cell should be submitted to the Commission. The concerned officials should see that the inspection of services is carried out regularly and status reports submitted to the Commission in a timely manner. Theft of energy should be identified and action taken against the culprits. Action taken report should also be submitted to the Commission, on the identified misuse of the supply of electricity. The concerned official should submit a quarterly report before the Commission.

The Commission's comments as per the last tariff order are yet to be complied. Status of compliance of the above directive should be furnished to the Commission by June 30' 2014.

**Compliance by the Electricity Department, Puducherry**

Quarterly progress report has been submitted to the Hon'ble commission vide letter No. 135 ED/SE-I/EE-II/F-ARR/2014-15 dated 11.09.2014. Further the Department has submitted a petition No. 140 of 2013 seeking for directions/clarifications in supply code and First Amendment pertaining to unauthorized use of Electricity and theft of Energy. On receipt of the above clarification/ direction, the intensity of Inspection will be increased.

**Comments of the Commission**

The compliance is noted. The Commission will expedite the direction/clarification after studying the views of other licensees also.

**Directive 13: Employee Cost/Manpower Study**

**Commission's Observation made in the Tariff Order FY 2014-15**

The submission of the Petitioner is noted. The restructuring plan as stated by the Petitioner should be submitted to the Commission. The status on the approval of the Central Government be submitted to the Commission.

Compliance is awaited. The status report on the compliance of the above directive should be submitted to the Commission by September 30' 2014.

**Compliance by the Electricity Department Puducherry**

At present the proposed restructuring of the Department is in advanced stage in Ministry of Finance / Government of India.

**Comments of the Commission**

Compliance is noted. The present status of restructuring shall be reported to the Commission by 30<sup>th</sup> June, 2015.

**Directive 14: Load Forecasting Study**

**Commission's Observation made in the Tariff Order FY 2014-15**

The Petitioner is directed to conduct a detailed load forecasting study for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) in order to

understand the load requirements in their area at various periods and submit to the Commission along with the next tariff petition.

The compliance on the above directive is awaited. Status report on the measures taken to comply with the above directive should be submitted before the Commission by September 30' 2014.

**Compliance by the Electricity Department Puducherry**

The short term forecasting for 3 years have been furnished in the Business Plan of the Department. The same has been filed on 29.09.2014. A medium and long term forecast would be prepared shortly.

**Comments of the Commission**

The study for medium term (7-10 years) and long term (15-25 years) forecasting may be expedited. The study to be conducted by PED should be an independent study reflecting the realistic forecast. In this connection the PED may refer to the 18<sup>th</sup> Power Survey of CEP.

**Directive 15: Bill Payment**

**Commission's Observation made in the Tariff Order FY 2014-15**

Commission appreciates the efforts made by the Petitioner in this regard. The progress of the above facilities as mentioned by the Petitioner should be submitted to the Commission by September 2013. The process of speedy implementation of the R-APDRP should be carried out.

Submission of the Petitioner has been noted. The status report on the compliance of the above directive should be submitted before the Commission by September 30' 2014.

**Compliance by the Electricity Department Puducherry**

Various modes of Collection are proposed to be introduced under R-APDRP such as

- (a) Internet payment gateway of various banks;
- (b) 24x7 bill collection counter at the Customer Care Centre for any consumer to pay the dues at any time;



(c) Normal bill collection counter at the section offices for any consumer to pay the dues and;

(d) Common bill collection counter proposed to be located at select locations in Puducherry/Karaikal region.

For HT and LT consumers' arrangement have been made with State Bank of India for online payment.

#### **Comments of the Commission**

Compliance of the directives is noted. The Commission appreciates, the steps taken by PED to improve the bill collection.

#### **Directive 16: Capital expenditure**

##### **Commission's Observation made in the Tariff Order FY 2014-15**

A separate detailed capital expenditure plan should be filed before the Commission in terms of the regulations. The scheme-wise year-wise expenditure should be highlighted before the Commission along with the cost-benefit analysis of each scheme and funding sources. Separate approval of the capital expenditure plan should be obtained from the Commission.

#### **Compliance by the Electricity Department Puducherry**

Capital expenditure for the next three years FY 2015-18 has been submitted along with the Business Plan for approval of the Hon'ble Commission.

#### **Comments of the Commission**

The compliance is noted. The business plan is being examined by the Commission.

#### **Directive 17: Enforcement Cell**

##### **Commission's Observation made in the Tariff Order FY 2014-15**

The submission of the Petitioner is noted. Quarterly status reports should be submitted regularly to the Commission.

#### **Compliance by the Electricity Department Puducherry**

Quarterly progress report has been submitted to the Hon'ble Commission vide letter

No. 135 ED/SE-I/EE-II/F-ARR/2014-15 dated 11.09.2014. Further the Department has submitted a petition No. 140 of 2013 seeking for directions/clarifications in supply code and First Amendment pertaining to unauthorized use of electricity and theft of energy. On receipt of the above clarification/ direction, the intensity of inspection will be increased.

**Comments of the Commission**

The compliance of the directive is noted. Steps may be taken to intensify the inspection to curb pilferage of energy. The Commission will expedite the clarifications/ directions after studying the views of other licensees also.

**Directive 18: Assessment of the open access consumers**

**Commission's Observation made in the Tariff Order FY 2014-15**

The submission of the Petitioner is noted. Status report on the progress of implementation of open access in the licensee area should be submitted before the Commission by September 30' 2014.

**Compliance by the Electricity Department Puducherry**

No applications have been received by the Department for Open Access so far. The approval of the Government has been sought for Separation of SLDC from the Department.

**Comments of the Commission**

The compliance by the PED is noted.

**Directive 19: Connected Load/Contract Demand based fixed charges for LT Industrial and Commercial categories**

**Commission's Observation made in the Tariff Order FY 2014-15**

The submission of the Petitioner is noted. The pending compliance as submitted by the Petitioner should be ensured.

**Compliance by the Electricity Department, Puducherry**

On full implementation of R-APDRP programme the fixed charges based on the

connected load would be implemented for both LT /Commercial and Industrial consumers.

**Comments of the Commission**

Compliance is noted. The PED is directed to report by 30<sup>th</sup> September, 2015 on the present status of implementation of R-APDRP programme.

**Directive 20: True-up Petition for the respective years**

**Commission's Observation made in the Tariff Order FY 2014-15**

The submission of the Petitioner is noted. However, in absence of the audited accounts for FY 2011-12 & FY 2012-13, the true-up for the respective years have yet not been filed before the Commission. The same should be submitted before the Commission in order to correctly assess the revenue gap of the utility. It was expected that the true-up for FY 2011-12 & FY 2012- 13 would be filed before the Commission this time along with the tariff petition for FY 2014-15. The Commission does not appreciate the delay in filing the true-up petitions for the respective years and the same should be filed before the Commission on time. It is expected that the future true-ups would be submitted on time, in order to carry forward the past gaps. The Commission would take strict action in case the true -ups are not submitted on time and no benefit would be allowed as a pass through to the Petitioner on account of delay in filing the true-up petitions.

**Compliance by the Electricity Department Puducherry**

Audit of FY 2011-12 & 2012-13 has been completed and the same has been furnished for Truing up of FY 2011-12 & FY 2012-13 respectively along with this petition.

Unaudited accounts have been prepared and the same is attached for provisional true up of FY 2013-14. Audit of accounts for FY 2013-14 is expected to be completed by February 2015 and the same will be furnished to the Commission immediately.

Hence, it is prayed that the directive may be dropped.

**Comments of the Commission**

It is noted that Final True up for FY 2011-12 and FY 2012-13 and Provisional True up for FY 2013-14 are submitted with ARR and Tariff Petition for MYT Period FY 2015-16 to FY 2017-18. Audit of Accounts for FY 2013-14 should be expedited.

**Directive 21: Proposal of the Energy Charges for the agriculture category**

**Commission's Observation made in the Tariff Order FY 2014-15**

The submission of the Petitioner is noted. The same should be submitted as per the time - line mentioned by the Petitioner.

**Compliance by the Electricity Department Puducherry**

The work of providing energy meters to the agriculture category is under process. The sample reading will be studied and proposal for energy based tariff will be submitted for the FY 2016-17.

**Comments of the Commission**

Compliance is noted. The present status of providing meter to Agricultural consumers should be reported by 30<sup>th</sup> June, 2015.

**Directive 22: Public grievance meetings**

**Commission's Observation made in the Tariff Order FY 2014-15**

The Petitioner is directed to convene monthly meetings with the consumers to discuss/sort out issues of consumers in the licensee area related to the supply of power/electricity/connections by ED-Puducherry

**Compliance by the Electricity Department Puducherry**

Public Grievance meeting has been conducted in the Town area of Puducherry, one meeting has been held at Mahe & Yanam respectively. The consumer related matters have been addressed. Further public grievance meeting in all Division are proposed to be convened in the months of December'14, January '15 & February'15.

**Comments of the Commission**

The compliance is noted. These meetings shall be conducted every month and a

monthly report shall be submitted to the Commission in this regard. The Commission also insists that the department should sort out the issues raised in the meetings.

**New Directives:**

**1. Unbundling & Corporatization**

As part of the Power Sector reforms as envisaged by the Electricity Act, 2003, the transmission and distribution activities are to be separated and independent corporations are to be formed. The transmission companies and the distribution companies thus formed under the Companies Act will have a distinct legal identity, apart from providing the management with better financial autonomy and more delegation of powers. Further, the new management structure ensures financial accountability and better consumer satisfaction.

The Commission directs the Petitioner to take up this matter the Government of Puducherry for early implementation.

**2. Safety of Consumers and Employees**

The Commission noted with concern from the audited accounts of the FY 2012-13 that an amount of Rs. 0.19 Crore was paid towards claims of electrocution cases and that there is a contingent liability of Rs. 0.85 Crore regarding the pending electrocution cases. The Commission directs the Petitioner to take necessary steps for regular patrolling to check the distribution lines particularly during the monsoon season. Further, the Petitioner should disseminate information and tips among the consumers during their monthly consumer grievance meetings to handle electrical items and to avoid touching the live wires. Apart from compliance to the statutory requirements, these types of consumer education and awareness programmes will be very helpful to avoid electrocution/accidents in semi-urban and rural areas.

The Commission also directs the Petitioner to take necessary steps to provide safety equipments/tools such as gum boots, safety boots, mechanical ladders, helmets etc. for the safety of their employees.

**3. Technology up gradation:**

The Commission directs the Petitioner should upgrade transmission and distribution lines and substations with latest and advanced technology. While drafting the Business plan for the control period from FY 2016-17, this aspect should be kept in mind to improve efficiency in service and to provide uninterrupted/reliable power supply. The commercial, financial and administrative functions should be fully computerised. The Commission also directs the Petitioner to initiate immediate action to introduce online billing, collection and complaints system to facilitate the consumers. The Business Plan should also make provision for proper training of the employees to handle the modern equipments, computer network etc.

**4. Publicity for Consumer Grievance Handling System**

The Commission directs the Petitioner to give proper publicity to the consumers through bills, advertisement in local newspapers and during the monthly consumer grievances meetings, the entire system for handling the consumer grievances as envisaged in the Electricity Act and the Regulations of the Commission. This will create awareness amongst the consumers to approach the proper forum for redressal of their grievances.

**5. Submission of Business Plan for MYT Control Period:**

As elaborated in Para 1.7 of this Tariff Order, the details in the Business Plan submitted by the Petitioner is insufficient. The supporting data such as, scheme-wise cost benefit analysis, financing plan, loss trajectory have not been adequately submitted. In view of the same, the Commission is constrained to defer the implementation of Multi Year Tariff and concomitant Business Plan. The Petitioner is therefore, directed to submit the revised Business Plan for the period FY 2016-17 to FY 2018-19, along with the requisite details as provided in JERC (Multi-year Tariff and Distribution) Regulations, 2014, latest by 31<sup>st</sup> July 2015. No further extension will be given as the MYT Petition would be required to be prepared only after approval of the Business Plan. The MYT submission deadline remains 30<sup>th</sup> November, 2015.

**6. Levy of FPPCA before 30<sup>th</sup> June of the following Financial Year**

During the Public Hearing held at Puducherry on 17<sup>th</sup> February 2015, the representatives from HT/EHT industries made a request that FPPCA may be finalised and levied before 30<sup>th</sup> June of the following year which will enable the units to account the FPPCA claim in the respective Financial Year. It was pointed out by them, if the expenditure towards FPPCA claim is received after the closure of the annual accounts of the Financial Year, it is accounted by the units in the next accounting period. The representatives of HT/EHT Industries apprehended that the Income Tax authorities may consider the FPPCA claim pertaining to the previous year(s) as “prior period items” and may not allow the same as business expenditure while assessing the current year income of the unit.

The Commission directs the Petitioner to finalise the FPPCA amount due from the consumers with respect to the Financial Year before 30<sup>th</sup> June of the following financial year and upload the same on the website of the Petitioner and give advertisement in the newspapers. This would facilitate the companies to assess the total liability of the company towards FPPCA of the Financial Year for accrual accounting before compilation, audit & adoption of the annual accounts.

## 12. Conclusion of Commission's Order

Having considered the Petition of Electricity Department of UT Puducherry for approval of Aggregate Revenue Requirement (ARR) and determination of retail tariffs for supply of energy, the Commission approves the Aggregate Revenue Requirement (ARR) and the tariff schedule for ED Puducherry for FY 2015-16.

1. The break-up of the Aggregate Revenue Requirement (ARR) approved for ED Puducherry for FY 2015-16 is given below (other than the treatment of Regulatory Asset as in Para 9.6 of this Tariff Order):

| Sl. No | Particulars  | Approved by the Commission (Rs. Crore) |
|--------|--|--|
| 1      | Cost of power purchase   | 1035.63                                |
| 2      | Employee Costs   | 78.22                                  |
| 3      | A&G expenses   | 5.68                                   |
| 4      | R&M Expenses   | 18.35                                  |
| 5      | Depreciation   | 35.21                                  |
| 6      | Interest & Finance Charges   | 24.87                                  |
| 7      | Interest on Working Capital  | 0.00                                   |
| 8      | Interest on Consumer Security Deposit  | 22.36                                  |
| 9      | Provision to meet arrears of interest on S.D                                   | 27.63                                  |
| 10     | Return on NFA/equity   | 8.89                                   |
| 11     | Less: Non-Tariff Income  | 3.79                                   |
| 12     | Aggregate Revenue Requirement  | <b>1253.05</b>                         |
| 13     | Revenue from existing tariff   | 1210.82                                |
| 14     | Revenue Gap for the year at existing tariff                                    | 42.23                                  |
| 15     | Less: gap/(surplus) for FY 2014-15 (RE) as assessed in this T.O.               | (21.33)                                |
| 16     | Add: gap for FY 2013-14 (review) as per T.O. dated 25 <sup>th</sup> April 2014 | 42.62                                  |
| 17     | Additional revenue from revised tariff   | 52.69                                  |
| 18     | Cumulative Gap at approved tariff (14+15+16+17)                                | 10.83                                  |

2. The Commission approves the revenue gap at Rs 10.83 Crore of ARR for FY 2015-16.
3. The approved retail tariff (as given below) for FY 2015-16 shall be in accordance with the tariff schedule specified in this order.



| Sl. No      | Category of Consumer                    | Approved Tariff FY 2015-16                  |                                   |                           |   |
|-------------|---|---|-----------------------------------|---------------------------|---|
|             |   | Fixed Charge (Rs/month/ connection/ kVA/HP) | Energy/ Variable Charges (Rs/kWh) | Average tariff (Rs./Unit) | "K" Factor for FPPCA formula for FY 2015-16 |
| <b>1(a)</b> | <b>Domestic &amp; Cottage</b>           |   |                                   |                           |   |
|             | 1-100                                   | 32  | 1.10                              | 1.29                      | 0.28  |
|             | 101-200                                 | 32  | 1.65                              | 1.81                      | 0.39  |
|             | 201-300                                 | 32  | 3.25                              | 3.48                      | 0.74  |
|             | >300                                    | 32  | 4.25                              | 4.36                      | 0.93  |
| 1(b)        | OHOB                                    | 27  | 0.00                              | 1.10                      | 0.24  |
| <b>2</b>    | <b>Commercial</b>                       |   |                                   |                           |   |
|             | 0-100                                   | 75  | 4.25                              | 4.46                      | 0.95  |
|             | 101-250                                 | 75  | 4.85                              | 5.10                      | 1.09  |
|             | >250                                    | 75  | 5.25                              | 5.45                      | 1.16  |
| <b>3</b>    | <b>Agriculture</b>                      |   |                                   |                           |   |
|             | Small Farmers                           | 9   | 0.00                              | 0.07                      | 0.02  |
|             | Other Farmers                           | 27  | 0.00                              | 0.36                      | 0.08  |
| <b>4</b>    | <b>Public Lighting</b>                  | <b>54</b>                                   | <b>5.40</b>                       | <b>6.52</b>               | <b>1.39</b>                                 |
| <b>5</b>    | <b>LT Industrial &amp; water Tanks</b>  |   |                                   |                           |   |
|             | All Consumption                         | 86  | 5.10                              | 5.12                      | 1.09  |
| <b>6</b>    | <b>Temporary Supply</b>                 |   |                                   |                           |   |
| 6(a)        | Light load                              | -   | 9.45                              | -                         | -   |
| 6(b)        | Special Illumination                    | -   | 9.45                              | -                         | -   |
| 6(c)        | Load exceeding 97kW/130HP               | -   | 9.45                              | -                         | -   |
| <b>7</b>    | <b>Hoardings/Signboards</b>             | 100   | 7.00                              | -                         | -   |
| <b>8</b>    | <b>HT-I Industrial &amp; Commercial</b> |   |                                   |                           |   |
| 8(a)        | Up to CD 5000 kVA (Industrial/IT/ITES)  | 235   | 4.75                              | 5.62                      | 1.20  |
| 8(b)        | Up to CD 5000 kVA (Commercial)          | 235   | 4.75                              | 6.33                      | 1.35  |
| 9           | HT-II Government & water tank           | 235   | 5.50                              | 5.54                      | 1.45  |
| 10          | HT-III EHT (above 5000 KVA)             | 220   | 4.75                              | 5.67                      | 1.18  |

4. As regards to the recovery of the past gap the Commission hereby approves an additional surcharge of 2.64% to be levied to all consumers on the fixed and energy charges (excluding taxes etc.) at the above approved tariff rates. However, the Agriculture and OHOB category would be excluded from the levy of this surcharge.
5. The approved tariff shall come in force with effect from 1<sup>st</sup> April 2015 and shall remain valid till the issuance of the next tariff order. All existing provisions which are

not modified by this order shall continue to be in force. The licensee shall publish the revised tariff structure and the salient features of tariff within one week in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply.

6. The licensee will compute fuel and power procurement cost variations and adjustments shall be made in consumer bills based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula/regulation separately notified by the Commission. For the purpose of calculation using FPPCA formula, **the approved per unit cost of power purchase ( $R_{\text{approved}}$ ) for use in the FPPCA formula (paisa per unit) is 361 paisa per unit for FY 2015-16.**
7. Copy of this order may be sent to Petitioner, CEA and Administration of UT of Puducherry. It shall be placed on the website of the Commission.

**Sd/-**  
**(S. K. Chaturvedi)**  
**Chairman**

**Certified Copy**

**(Keerti Tewari)**  
**Secretary**

Place: Gurgaon

Date: 10.04.2015

## 13. Tariff Schedule

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### TARIFF FOR SUPPLY OF ELECTRICITY AT LOW TENSION AND HIGH TENSION GENERAL

1. The tariff indicated in this tariff schedule is the tariff rate payable by the consumers of Union Territory of Puducherry.
2. These tariffs are exclusive of electricity duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time.
3. Unless otherwise agreed to, these tariffs for power supply are applicable to single point of supply.
4. The power supplied to a consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff. If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of Section 126 of the Electricity Act, 2003 & Supply Code Regulations notified by JERC.

Provided that: (a) if a portion of the domestic premises limited to only one room is used for running small household business having connection under domestic category, such connection shall be billed under domestic category provided that the total monthly consumption of the consumer (including consumption for above mentioned small household business) does not exceed 150 kWh

(b) If either more than one room or only one room having monthly consumption exceeding 150 kWh for consecutive three months is detected in the domestic premises being used for mixed purposes having domestic connection, such connection shall further be billed under commercial category until a separate connection of appropriate tariff is taken for that portion used for non-domestic

purpose.

5. If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the EA 2003.

**6. Power Factor Charges for HT and EHT**

The monthly average power factor shall mean the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded off two decimals.

- (a) The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor upto 0.7(lagging).
- (b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging).
- (c) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without pre-judice for the levy of the surcharge.
- (d) The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95
7. If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per provision of the Act & Supply Code Regulations.
8. Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out, Similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

9. The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately.

**Explanation:** Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh ( $12000 \times 100 / 120$ ) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 KVA and excess consumption of 2000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

10. Unless specifically stated to the contrary, the figures of energy charges relates to Rs per unit (kWh) charge for energy consumed during the month.
11. **Delayed payment surcharge** shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month shall be levied on all arrears of bills. In case of delay less than a month, the surcharge will be levied at 2% per month on proportionate basis considering a month consists of 30 days. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paise shall be ignored and amount of 50 paise or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.
12. **Advance Payment Rebate:** If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1%

per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

- 13. Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.

**14. Time of Day (TOD) tariff**

- (i) Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.
- (ii) The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

| Time of use   | Demand Charges | Energy Charges                        |
|---|----------------|---------------------------------------|
| Normal period<br>(6:00 a.m. to 6:00 p.m)            | Normal Rate    | Normal rate of energy charges         |
| Evening peak load period<br>(6:00 p.m to 10.00 p.m) | Normal Rate    | 120% of normal rate of energy charges |
| Off-peak load period<br>(10:00 p.m to 6:00 a.m)     | Normal Rate    | 90% of normal rate of energy charges  |

- (iii) Applicability and Terms and Conditions of TOD tariff:

- (a) The Commission directs the Petitioner to introduce TOD tariff as mentioned above during the FY 2015-16.
- (b) The facility of aforesaid TOD tariff shall not be available to HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power.
- (c) The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff.

(d) In the event of applicability of TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply.

15. The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered/ refunded in accordance with the terms and conditions specified in the FPPCA formula.
16. As regard to the recovery of the past gap the Commission hereby approves an additional surcharge of 10% to be levied to all consumers above tariff rates on the fixed and energy charges (excluding taxes etc.) towards the recovery of the past accumulated deficit. However, the Agriculture and OHOB category would be excluded from the levy of this surcharge.
17. The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order for FY 2015-16.
18. Schedule of service charges and other charges would be as approved in this tariff order.

The detailed tariff schedule is as below.

**A. LOW TENSION SUPPLY****Domestic Purposes****1.0 Domestic Purposes (A2)****1.1 This tariff is applicable to services for lights, fans, Air-conditioning, Heating and other small domestic appliances etc used for:**

- a) Genuine domestic purposes including common services for stair-case, lifts, water tanks in the purely domestic apartments.
- b) Supply to actual places of public worship such as temples, mosques, churches etc.
- c) Ashrams and Mutts, Non-commercial orphanage homes and old people homes run by religious and charitable institutions, social welfare and voluntary organisations.
- d) Youth hostels, Harijan hostels, Rehabilitation Centres, Anganwadies and Balwadies run by Social Welfare Department.
- e) For own residences where one room is set apart for the purpose of consultation by doctors, lawyers, engineers, architects and auditors.
- f) To handloom in residence of handloom weavers (regardless of the fact whether outside labour is employed or not) and to handloom in sheds erected.
- g) To the residences where supply from a house is extended to tailoring shops, job typing, document writing, laundry pressing, and small caterers set up in the verandah of the house with small lighting load only (one tube light only).

**1.2 The charges for domestic service are as indicated in the table below:**

| <b>Consumption range</b>  | <b>Fixed Charges<br/>(Rs/connection/month)</b> | <b>Energy charge<br/>(Rs/kWh)</b> |
|---------------------------|--|-----------------------------------|
| 0-100 units per month     | 32   | 1.10                              |
| 101-200 units per month   | 32   | 1.65                              |
| 201-300 units per month   | 32   | 3.25                              |
| Above 300 units per month | 32   | 4.25                              |

The method of billing of charges shall be as explained below:

(a) Say units billed in a month are 80 units. Then the fixed charges will be Rs. 32/month and energy charges Rs. (80 units X Rs 1.10/unit)

(b) In case the units billed are 275, then the fixed charges will be Rs 32/month and energy charges will be Rs (100 units X 1.10 + 100 units X 1.65 + 75 units X 3.25)



## 2.0 HUT SERVICES (A3)

- 2.1 For supply to bonafide hut services with only two numbers of 40 W Florescent Tube lights.
- 2.2 The charges for hut service (OHOB) are as indicated in Table below:

| Description  | Fixed charges<br>(Rs./connection/month) |
|--------------|---|
| Hut Services | 27                                      |

- Hut is defined as a living place not exceeding 300 sq. ft. or 27.87 sq. mt. with mud wall/brick wall or thatched wall and thatched roof only. Hut does not include farm huts. If any of the conditions is changed at a later stage, this concessional supply will be discontinued and the consumer will have to take metered supply.
- The tariff under this item is also applicable for houses constructed for economically weaker sections under the "Chief Minister's 5000 houses programme" and houses constructed by the District Rural Development Agency under Indira Awaas Yojana and by the Adi Dravidar Welfare Department having a living space not exceeding 300 sq. ft. or 27.87 sq.
- The consumer under this category should use only two numbers of 40 watts florescent tube lights. He should not use bulbs/tube lights of higher wattage or connect any other electrical equipment/ appliances other than those mentioned above. Supply from such services should not be tapped for any other purposes including functions, public meetings and also for neighboring huts. If at any time, any unauthorized load or extension, use of higher wattage bulbs or use of service for other purposes is detected, the service will be disconnected forthwith.

## 3.0 COMMERCIAL (A1)

- 3.1 This tariff is for Lights and combined installation of lights and fans, mixed loads of lights and power, heating and air-conditioning applicable to:
- Non-domestic and non-industrial consumers, trade and commercial premises.
  - Educational institutions, hostels, public libraries.
  - Hotels, Restaurants, Boarding and Lodging Homes
  - Hospitals, Private clinics, Nursing Homes, Diagnostic Centres, X-ray Units etc.

- e) IT related development Centres and Service centres.
- f) Common services for Stair-case, lifts, water tanks etc in the purely commercial/ Combination of commercial and domestic.

3.2 The charges are as indicated in the table below:

| <b>Consumption range</b>  | <b>Fixed Charges<br/>Rs/connection/month</b> | <b>Energy charge<br/>Rs./kWh</b> |
|---------------------------|--|----------------------------------|
| 0-100 units per month     | 75   | 4.25                             |
| 101-250 units per month   | 75   | 4.85                             |
| Above 250 units per month | 75   | 5.25                             |

Note: The method of calculation of charges shall be same as explained in Para 1.2 above

#### **4.0 AGRICULTURE SERVICES (D) Agriculture/Cottage Industries etc.**

##### **4.1 Agriculture (D1)**

For supply to bonafide Agricultural Services with a connected load of not less than 3 HP per service.

| <b>Description</b> | <b>Fixed Charges<br/>(Rs./HP/month)</b> |
|--------------------|---|
| Small Farmers      | 9                                       |
| Other Farmers      | 27                                      |

#### **NOTE:**

- Electricity will be supplied under the tariff category "Small farmers" to those consumers whose families are solely dependent on the income derived from their agricultural land holding, which should not exceed two and half acres of wet land or five acres of dry land. A certificate to this effect from Revenue authority shall be produced. "Small farmer means a person whose total holding, whether as owner, tenant or mortgaged with possession or partly in one capacity and partly in another, does not exceed two-and-a half acres of wet lands or five acres of dry land. In computing the extent of land held by a person who holds wet and dry lands, two acres of dry land shall be taken as equivalent to one acre of wet land.

2. The above concession will be withdrawn if resale of energy or unauthorized load/ extension or use for other purpose is detected by the Department.
3. Agricultural power loads below 3 H.P. will be charged under Tariff Category A1. A bonafide farmer may use his motor in the Agricultural Service for allied agricultural purposes such as sugarcane crushing, thrashing etc. with the prior approval of concerned Executive Engineer (Operation & Maintenance), Electricity Department.
4. Power supply to Farm Houses shall be metered separately and charged under domestic tariff (A2).

#### **Payment of Tariff Charges by Agriculture Consumers**

1. The Tariff shall be collected in three equal instalments payable in April, August and December in each year. The instalments shall be payable before the 15<sup>th</sup> of the respective months. The service charges of Rs 225 per annum shall also be collected in three instalments of Rs. 75 each, along with instalment of fixed charges in April, August and December months.
2. For new service, the first instalment shall be proportionate to the number of whole months remaining till the month in which the first instalment is due. Fraction of a month shall be reckoned as a whole month.

#### **4.2 Cottage Industries /Poultry Farms/ Horticulture/Pisciculture (D2)**

It is applicable to bonafide cottage industries, horticultural nurseries including plant tissue culture media, bona fide poultry farms and pisciculture.

The charges are as indicated in the table below:

| <b>Consumption range</b>  | <b>Fixed Charges<br/>(Rs/connection/month)</b> | <b>Energy charge<br/>(Rs/kWh)</b> |
|---------------------------|--|-----------------------------------|
| 0-100 units per month     | 32   | 1.10                              |
| 101-200 units per month   | 32   | 1.65                              |
| 201-300 units per month   | 32   | 3.25                              |
| Above 300 units per month | 32   | 4.25                              |

**Note:**

**(a) Cottage industries**

The following conditions should be satisfied in order that an industry may be classified as a bonafide cottage industry:

- (1) It should be conducted entirely within the home, the home being deemed to be permanent residence of the proprietor.
- (2) The industry shall not cause any residence to constitute a factory within the meaning of the Factories Act, 1948.
- (3) Not more than two persons outside the immediate family of the proprietor shall be employed in the factory.
- (4) It should be certified by the Director of Industries that the industry for which power is used is a cottage industry.
- (5) The produce is not purely utilized mainly for the domestic consumption of the proprietor but should also be available for sale to the public.

**(b) Poultry farms**

The following conditions should be satisfied in order that the service may be classified as a bona fide poultry farm.

- (1) The capacity of the farm shall be a minimum of 100 birds and maximum of 5,000 birds (both layer and broiler birds).
- (2) The application of the beneficiary seeking such concession shall be verified and recommended by the Animal Husbandry Department.

**(c) Horticultural/Pisiculture**

- (1) The applications of the beneficiary seeking such concession shall be verified and recommended by the Director, Agriculture Department. For Pisiculture, applications of the beneficiary seeking such concession shall be verified and recommended by the Director, Fisheries Department.

**5.0 Public Lighting**

5.1 The tariff for public lighting shall be as follows:

| Description     | Fixed Charges<br>(Rs/pole/month) | Energy charge<br>(Rs/KWh) |
|-----------------|----------------------------------|---------------------------|
| Public Lighting | 54                               | 5.40                      |

5.2 This tariff will also apply to public lighting in markets, bus stands, traffic signals, high mast lights on public ways, public parks, public lighting in notified industrial estates.

**6.0 LT Industrial and Water Works (C)**

6.1 Applicable to low tension industrial consumers including lighting in the industrial services and Water Tanks including lighting in the premises maintained by State Government Departments / Undertakings and Local Bodies.

6.2 The charges are as indicated in the table below.

| Consumption range | Fixed Charges<br>Rs/connection/month | Energy charge<br>Rs/KWh |
|-------------------|--------------------------------------|-------------------------|
| All units         | 86                                   | 5.10                    |

**LT Supply Limit for all LT categories**

For single phase connection, the connected load shall not exceed 4 kW, and for 3 phase connection, the connected load shall not exceed 130 HP or 97 kW.

**B. HIGH TENSION SUPPLY****7.0 High Tension – I****7.1 High Tension I (a)**

Applicable to industrial establishments, IT and ITES based Companies registered under Factories Act/ Companies Act with contracted maximum demand up to 5000 kVA.

**High Tension I (b)**

For Commercial Establishments including Laboratories, Hotels, Marriage Halls, Cinema Theatres, Private educational Institutions, Private Hospitals, shopping Malls, Telephone exchanges, broadcasting companies with contracted maximum demand up

to 5000 kVA.

7.2 The Demand and the Energy Charges are as indicated in the table below:

| Description   | Charges           |
|---|-------------------|
| <b>HT (I) (a) For contract demand up to 5000 kVA/Industrial</b> |                   |
| Fixed (Demand) Charges  | Rs. 235/kVA/month |
| Energy Charges  | Rs. 4.75/kWh      |
| <b>HT (I) (b) For contract demand up to 5000 kVA/Commercial</b> |                   |
| Fixed (Demand) Charges  | Rs. 235/kVA/month |
| Energy Charges  | Rs. 4.75/kWh      |

7.3 The billing shall be on the maximum demand recorded during the month or 75% of contracted demand whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand will be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal energy rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately.

**Explanation:**

Assuming the contract demand as 100 kVA, maximum demand at 120 kVA and total energy consumption as 12000 units, then the consumption corresponding to the contract demand will be 10,000 units ( $12000 \times 100 / 120$ ) and consumption corresponding to the excess demand will be 2000 units. This excess demand of 20 kVA and excess consumption of 2000 units will be billed at twice the respective normal rate. E.g. in case of HT(I) (a) category, excess demand and consumption will be billed at the rate of Rs 470/kVA/month and Rs 9.50/kWh respectively.

**8.0 High Tension – II**

8.1 Applicable to State and Central Government establishments of non-industrial and non-commercial nature.

8.2 The fixed/demand charges and energy charges are as indicated in the table below.

| <b>Description</b>     | <b>Charges</b>    |
|------------------------|-------------------|
| Fixed (Demand) Charges | Rs. 235/kVA/month |
| Energy Charges         | Rs. 5.50/kWh      |

8.3 The billing shall be the maximum demand recorded during the month or 75% of contracted demand whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand will be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal energy rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately. Refer para 7.3 for illustration.

## **9.0 High Tension – III**

9.1 Applicable to all types of industries supplied at 110 KV or 132 KV as the case may be.

9.2 The demand and energy charges are as indicated in the table below:

| <b>Description</b>     | <b>Charges</b>    |
|------------------------|-------------------|
| Fixed (Demand) Charges | Rs. 220/kVA/month |
| Energy Charges         | Rs. 4.75/kWh      |

9.3 The billing shall be the maximum demand recorded during the month or 75% of contracted demand whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand will be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal energy rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the connections shall be disconnected immediately. Refer Para 7.3 of this schedule for illustration.

### **Supply Voltage for all HT categories**

The supply voltage for HT consumers up to 5000 kVA will be 33 kV, 22 kV or 11 kV as



the case may be. New High Tension consumers who want to avail a contract demand above 5000 KVA or existing High Tension consumers who want to enhance their demand beyond total contract demand of 5000 kVA should avail power at 110 KV or 132 KV as the case may be.

**C. TEMPORARY SUPPLY**

10. The tariff applicable and minimum charges for the temporary supply of energy will be as follows:

| <b>Sl. No.</b> | <b>Category</b>  | <b>Tariff Applicable</b>           | <b>Minimum Charges</b>                          |
|----------------|--|------------------------------------|---|
| (a)            | Lights or combined installation of lights and fans, motive power, heating and others | Entire Consumption:<br>Rs 9.45/kWh | Rs 200 per connection per month or part thereof |
| (b)            | Special Illumination   | Entire Consumption:<br>Rs 9.45/kWh | Rs 500 per connection per month or part thereof |
| (c)            | Construction and testing purpose for load exceeding 130 HP or 97 kW                  | Entire Consumption:<br>Rs 9.45/kWh | Rs 500 per connection per month or part thereof |

**NOTE:**

- (1) The rate for Special illumination shall apply to weddings, garden-parties and other Private/Government functions when the illumination is obtained through bulbs fastened in other surfaces of wall of buildings, on trees and poles inside the compound and in pandal etc., outside the main building.
- (2) In cases where such Special illumination is done in the existing regular services the energy utilized for such illumination shall be metered separately and the consumption will be charged under Special illumination charge as levied under temporary supply.
- (3) Wherever such Special illumination is done unauthorisedly, a penal charge of Rs. 500 for service shall be levied in addition to the existing tariff of the installation.
- (4) Other conditions for connection of line and service connection charges, dismantling, security deposit etc. will be as per the rules now in force.
- (5) For supply required at short notice that is within three days from the date of



application for temporary service connections, an urgency charge of Rs. 50 shall be paid along with other normal tariff charges.

**D. Hoardings/Signboards**

Electricity for lighting external advertisements, external hoardings and displays at departments stores, malls , multiplexes, theatres, clubs, hotels, bus shelters, Railway Stations shall be separately metered and charged at the tariff applicable for “Advertisements and Hoardings” category, except such displays which are for the purpose of indicating / displaying the name and other details of the shop, commercial premises itself. Such use of electricity shall be covered under the prevailing tariff for such shops or commercial premises. The connection for “Advertisements and Hoardings” category would be covered under the permanent supply of connection.

| <b>Energy Charges<br/>(Rs./kWh)</b> | <b>Fixed Charge</b>               |
|-------------------------------------|-----------------------------------|
| 7.00                                | Rs. 100/kVA/Month or part thereof |

**13. Schedule of Services and Charges**

**Charges for service connections**

|            |                                  | <b>Category</b>                      | <b>Charges<br/>(Rs.)</b> |
|------------|----------------------------------|--------------------------------------|--------------------------|
| <b>(A)</b> | New LT overhead service lines    | (i) One hut one Bulb                 | Nil                      |
|            |                                  | (ii) Other single phase Services     | 250                      |
|            |                                  | (iii) Three phase Services           | 500                      |
|            |                                  | (iv) L.T C.T operated Meter services | 3000                     |
|            |                                  | (v) H.T Services                     | 5000                     |
| <b>(B)</b> | New LT underground service lines | (i) Single Phase services            | 500                      |
|            |                                  | (ii) Three phase Services            | 1000                     |
| <b>(C)</b> | Rating / re-rating of services   | (i) Single phase Services            | 125                      |
|            |                                  | (ii) Three phase Services            | 250                      |
|            |                                  | (iii) L.T C.T operated Meter service | 1500                     |
|            |                                  | (iv) H.T Service                     | 2500                     |

**Note:** The above charges under (A) & (B) will be applicable for addition or alteration or reduction of connected load and enhancement or reduction of CMD or alteration of internal Electrical installations.

**Testing of installation**

Testing for servicing a new installation (or of an extension or alteration) - For the first test No Charge. Subsequent testing warranted due to absence of contractor or his representative (or) due to defects in wiring of consumer's premises or at the request of the consumer or at occasions that warrant testing of installations for the second time for reasons attributable to the consumers

|   | <b>Charges (Rs.)</b> |
|---|----------------------|
| i) Domestic lighting / Commercial lighting / Agriculture Services | 200                  |
| (ii) Other LT Services  | 900                  |
| (iii) HT/EHT Services   | 7500                 |

**Testing of meters & metering arrangements**

For testing of meter at the instance of the consumer:

|   | <b>Charges (Rs.)</b> |
|---|----------------------|
| (i) Single phase direct meter   | 150                  |
| (ii) Three phase direct meter upto 50A                                  | 200                  |
| (iii) L.T C.T coil test   | 800                  |
| (iv) H.T Tri-vector Meter (0.5 class accuracy or CT operated LT meters. | 1500                 |
| (v) H.T Tri-vector Meter (0.2 class accuracy)                           | 2000                 |
| (vi) H.T Metering Cubicle   | 3500                 |

**Testing of HT/EHT consumer protective equipment**

|  | <b>Charges (Rs.)</b> |
|--|----------------------|
| Testing charges for protective relays (Earth fault, line fault etc.) | 4500                 |
| Testing charges for one set of current transformer.                  | 4500                 |
| Testing charges for one set of potential transformers.               | 4500                 |
| Testing charges for one set of circuit breaker                       | 4500                 |
| Testing charges for measurement of earth resistance.                 | 3000                 |
| Testing charges for Transformer oils                                 | 500                  |

**Disconnection / Re-connection charges**

|   | <b>Charges (Rs.)</b> |
|---|----------------------|
| (i) Disconnection of L.T service on request           | 100                  |
| (ii) Disconnection of HT service on request           | 500                  |
| (iii) Reconnection of L.T Service (on all occasions). | 100                  |
| (iv) Reconnection of HT Service (on all occasions).   | 500                  |

**Title transfer of services**

|                                       | <b>Charges (Rs.)</b> |
|---------------------------------------|----------------------|
| (i) Domestic                          | 250                  |
| (ii) Commercial lighting installation | 500                  |
| (iii) All other LT installation       | 1000                 |
| (iv) HT/EHT Services                  | 2000                 |

**Furnishing of certified copies (To be issued to the consumer only)**

|   | <b>Charges (Rs.)</b>             |
|---|----------------------------------|
| (i) Issue of duplicate Monthly bills for a month. | 10                               |
| (ii) Contractor's completion-cum test report      | 10                               |
| (iii) Ledger extract                              | 20/calendar year or part thereof |
| (iv) Agreement                                    | 50                               |
| (v) Estimate                                      | 50                               |

**Meter rent charges**

| <b>S. No.</b> | <b>Particulars</b>         | <b>Charges (Rs.)</b>                   |
|---------------|----------------------------|--|
| (i)           | single-phase meter         | 10/- per meter/ month or part thereof  |
| (ii)          | Three phase meter          | 25/- per meter/ month or part thereof  |
| (iii)         | LT C.T operated meters     | 200/- per meter/ month or part hereof  |
| (iv)          | HT/EHT metering equipments | 500/- per meter/ month or part thereof |

**Fuse renewal charges**

|   | <b>Charges (Rs.)</b> |
|---|----------------------|
| (i) Domestic                                      | NIL                  |
| (ii) Commercial                                   | 50                   |
| (iii) L.T Industrial                              | 50                   |
| (iv) High Tension/Extra High Tension installation | 250                  |

**Shifting of meter board at consumer's request**

|                            | <b>Charges (Rs.)</b> |
|----------------------------|----------------------|
| (i) LT single phase supply | 125                  |
| (ii) LT Three phase supply | 250                  |