

**Before the**  
**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**  
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**CASE NO. 168 of 2017**

**In the matter of**  
**Petition of Maharashtra State Electricity Transmission Co. Ltd. for Truing-up of**  
**Aggregate Revenue Requirement (ARR) for FY 2015-16 and FY 2016-17,**  
**Provisional Truing-up of ARR for FY 2017-18 and revised estimates of ARR for FY**  
**2018-19 and FY 2019-20, including disallowed capitalisation for FY 2010-11 to FY**  
**2014-15**

**Coram**

**Shri Anand B. Kulkarni, Chairperson**

**Shri I. M. Bohari, Member**

**Shri Mukesh Khullar, Member**

**ORDER**

**Date: 12 September, 2018**

Maharashtra State Electricity Transmission Co. Ltd. (MSETCL), Prakashganga, 6<sup>th</sup> Floor, Plot No. C-19, 'E' Block, Bandra-Kurla Complex, Mumbai has filed a Petition on 30 November, 2017 for Truing-up of Aggregate Revenue Requirement (ARR) for FY 2015-16 under the MERC (Multi Year Tariff) Regulations ('MYT Regulations'), 2011; and Truing-up of ARR for FY 2016-17, provisional Truing up of approval of ARR for FY 2017-18 and revised estimates of ARR for FY 2018-19 and FY 2019-20 under the MYT Regulations, 2015, including the impact of past period disallowed capitalisation for FY 2010-11 to FY 2014-15. Thereafter, MSETCL submitted a revised Petition on 11 June, 2018.

The Commission, in exercise of its powers under Sections 61 and 62 of the Electricity Act (EA), 2003 and all other powers enabling it in this behalf, and after taking into consideration submissions made during these proceedings and the public consultation process, and other relevant material has approved the Truing-up of ARR for FY 2015-16 and FY 2016-17, Provisional Truing-up of the ARR for FY 2017-18 and the revised estimates of ARR for FY 2018-19 and FY 2019-20 in this Order.

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### **LIST OF ABBREVIATIONS**

|                 |   |
|-----------------|---|
| AC System       | Alternating Current System                              |
| A&G             | Administrative and General                              |
| ARR             | Aggregate Revenue Requirement                           |
| ATE             | Appellate Tribunal for Electricity                      |
| BEST            | Brihanmumbai Electric Supply and Transport Undertaking  |
| Commission/MERC | Maharashtra Electricity Regulatory Commission           |
| CBA             | Cost Benefit Analysis                                   |
| CPI             | Consumer Price Index                                    |
| Capex           | Capital Expenditure                                     |
| CWIP            | Capital Work In Progress                                |
| DA              | Dearness Allowance                                      |
| DC System       | Direct Current System                                   |
| DPR             | Detailed Project Report                                 |
| EA 2003         | Electricity Act, 2003                                   |
| EHV             | Extra High Voltage                                      |
| FY              | Financial Year  |
| GFA             | Gross Fixed Assets                                      |
| IGAAP           | Indian Generally Accepted Accounting Principles         |
| IND AS          | Indian Accounting Standards                             |
| InSTS           | Intra-State Transmission System                         |
| IoWC            | Interest on working capital                             |
| kV              | Kilo Volt   |
| kW              | Kilo Watt   |
| LILO            | Loop In Loop Out  |
| MAT             | Minimum Alternate Tax                                   |
| MSEB            | Maharashtra State Electricity Board                     |
| MSETCL          | Maharashtra State Electricity Transmission Company Ltd. |
| MSEDCL          | Maharashtra State Electricity Distribution Company Ltd. |
| MSLDC           | Maharashtra State Load Despatch Centre                  |
| MTR             | Mid-Term Review   |
| MYT             | Multi Year Tariff                                       |
| MW              | Mega Watt   |
| O&M             | Operation and Maintenance                               |

|          |   |
|----------|---|
| PBT      | Profit Before Tax                                     |
| R&M      | Repair and Maintenance                                |
| RInfra-T | Transmission Business of Reliance Infrastructure Ltd. |
| RInfra-D | Distribution Business of Reliance Infrastructure Ltd. |
| RoE      | Return on Equity                                      |
| SBI      | State Bank of India                                   |
| SBAR     | State Bank of India Advance Rate                      |
| STU      | State Transmission Utility                            |
| TPC-T    | Transmission Business of Tata Power Company           |
| TPC-D    | Distribution Business of Tata Power Company           |
| TSU      | Transmission System User                              |
| TTSC     | Total Transmission System Cost                        |
| WPI      | Wholesale Price Index                                 |

## **1 INTRODUCTION**

### **1.1 Background**

- 1.1.1 MSETCL is a Company formed under Government of Maharashtra (GoM) Resolution dated 24 January, 2005 from 6 June, 2005 in accordance with Part XIII of the Electricity Act (EA), 2003. It was incorporated as a Company under the Companies Act, 1956 on 31 May, 2005.
- 1.1.2 The Provisional Transfer Scheme was notified under Section 131(5) (g) of the EA, 2003 on 6 June, 2005, which resulted in the creation of four successor Companies (including MSETCL) from the erstwhile Maharashtra State Electricity Board (MSEB).
- 1.1.3 MSETCL is in the business of Transmission of electricity in Maharashtra, and has been notified as the State Transmission Utility (STU) as per Section 39 of the EA, 2003.

### **1.2 Multi-Year Tariff Regulations and Control Period**

- 1.2.1 The MYT Regulations, 2011 were applicable for the 2<sup>nd</sup> Control Period FY 2011-12 to FY 2015-16 and were amended in October, 2011.
- 1.2.2 On 8 December, 2015 the Commission notified the MYT Regulations, 2015 for the 3<sup>rd</sup> Control Period FY 2016-17 to FY 2019-20. The First Amendment to these Regulations is notified on 29 November, 2017.

### **1.3 Petition and Prayers of MSETCL**

- 1.3.1 MSETCL filed its Petition for Truing-up of ARR for FY 2015-16 and FY 2016-17, Provisional Truing-up of ARR for FY 2017-18 and revised estimates of ARR for FY 2018-19 and FY 2019-20 on 30 November, 2017 and the revised Petition on 11 June, 2018. MSETCL has also sought additional recovery due to the impact of disallowed capitalisation for past years.
- 1.3.2 MSETCL's main prayers in the revised Petition are as follows:

- 2. Allow the recovery of impact of disallowed capitalization for past years along with the appropriate carrying cost and allow to recover the same with ARR for FY 2018-19;*
- 3. Allow true-up of expenses of FY 2015-16 based on the Audited Accounts and approve the Revenue gap/(surplus) arrived after duly sharing the efficiency gain/loss with the transmission system users of MSETCL according to the principle as set out in MERC (MYT) Regulations, 2011;*
- 4. Allow true-up of expenses of FY 2016-17 based on the Audited Accounts*

- and approve the Revenue gap/(surplus) arrived after duly sharing the efficiency gain/loss with the transmission system users of MSETCL according to the principle as set out in MERC (MYT) Regulations, 2015;*
- 5. Approve the provisional true-up for FY 2017-18 to the extent claimed by MSETCL in accordance with the submissions and rationale given in this Petition as per MERC (MYT) Regulations, 2015;*
  - 6. Approve the revised ARR forecast for FY 2018-19 to FY 2019-20 as provided in the Petition according to the principle of the Commission set out in MERC (MYT) Regulations, 2015;*
  - 7. Determine the revised ARR for FY 2018-19 to FY 2019-20 that would help in recovery of consolidated ARR including revenue gap/(surplus);*
  - 8. Provide the workable excel model used by the Hon'ble Commission for approval of the above true up and ARR Requirement of MSETCL;*

1.3.3 On 9 December, 2017, the Commission forwarded the data gaps and information requirements, which MSETCL responded to on 2 January, 2018. The first pre-admittance discussion on the Petition was held on 14 December, 2017. The list of persons who attended the discussion is at **Appendix-1**. A second pre-admittance discussion on the Petition, for which the Authorised Consumer Representatives (ACRs) were also invited, was held on 22 February, 2018. No ACRs attended the discussion. The list of persons who attended the discussion is at **Appendix-2**.

1.3.4 Additional clarifications were sought on 27 April, 2016 and MSETCL replied to these on 11, 12, 13, 14, 17 and 20 May, and 10 and 13 June, 2018.

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

1.4.1 The Commission admitted the Petition on 12 June, 2018 and directed MSETCL to publish a Public Notice in accordance with Section 64 of the EA, 2003, in the prescribed abridged form and manner and to reply expeditiously to all the suggestions and comments received.

1.4.2 MSETCL issued a Public Notice inviting comments/suggestions/objections on its Petition. The Public Notice was published in English in Indian Express and Hindustan Times, and in Marathi in Sakal and Punyanagari, all daily newspapers, on 18 June, 2018. The Petition and its Summary were made available for inspection/purchase at MSETCL's offices and website ([www.mahatransco.in](http://www.mahatransco.in)). The Public Notice and Executive Summary of the Petition were also made available on the websites of the Commission ([www.mercindia.org.in](http://www.mercindia.org.in), [www.merc.gov.in](http://www.merc.gov.in)) in downloadable format.

1.4.3 The Commission received written suggestions and objections on the Petition. The Public Hearing was held on 23 July, 2018. The list of persons who attended the Public Hearing is at **Appendix-3**. No oral suggestions or objections were raised during the Public Hearing.

1.4.4 The Commission has ensured that the due process contemplated under law to ensure transparency and public participation was followed at every stage and adequate opportunity was given to all concerned to express their views.

## **1.5 Organisation of the Order**

1.5.1 This Order is organised in the following ten Sections:

- **Section 1** provides a brief of the regulatory process undertaken by the Commission.
- **Section 2** deals with the suggestions / objections received, the responses of MSETCL and the Commission's rulings.
- **Section 3** deals with the impact of disallowed capitalisation of FY 2010-11 to FY 2014-15.
- **Section 4** deals with the approval of Truing-up of ARR for FY 2015-16.
- **Section 5** deals with the approval of Truing-up of ARR for FY 2016-17.
- **Section 6** deals with the provisional Truing-up of ARR for FY 2017-18.
- **Section 7** deals with the approval of revised estimates of ARR for the FY 2018-19 and FY 2019-20.
- **Section 8** deals with MSETCL's compliance to the directives issued by the Commission in the previous Orders.
- **Section 9** sets out the mechanism for recovery of Transmission Charges.
- **Section 10** deals with the applicability of the present Order.

## **2 SUGGESTIONS/OBJECTIONS RECEIVED, MSETCL'S RESPONSE AND THE COMMISSION'S RULING**

### **2.1 High Transmission and Retail Tariff in Maharashtra**

#### ***Suggestion/Objections***

2.1.1 Shri Hari Ram Shinde of Farmers Welfare Forum, Nashik has raised the following objections:

- Transmission Tariff and Distribution Tariff in Maharashtra is highest amongst all the States in India on account of incorrect planning, delays in project execution, and inefficiencies in Generation, Transmission and Distribution by private as well as Government Utilities/Licensees. It is further stated that it is evident from present and past Petitions filed by MSETCL that the transmission projects are being delayed by around 5 to 10 years and such projects are still under construction without any visibility regarding their completion. As an example, the Babhaleshwar – Mumbai EHV line and 400 kV HT Sub-station in Nashik are not being completed on time despite repeated tendering process, which raises project costs and ultimately burdens the retail consumers. Moreover, there is erection of Sub-stations in certain areas even where these are not required, which causes under-utilization of assets.
- There is a lack of co-ordination amongst the existing Transmission Licensees such as Tata Power, Reliance, Adani and Power Grid Corporation of India (PGCIL). Network erection is being done as per individual requirements without proper planning. Moreover, network erection is being done without prior approval from the District Collectors causing damage to farmers.
- It is suggested that transmission network should be laid based on actual demand, with proper planning and co-ordination amongst Licensees such as MSETCL, Tata Power, Adani and PGCIL in a timely manner with payment of due compensation to land owners to avoid delays and cost overruns and consequently, burden on the consumers.
- It is also suggested to separate the functioning of the STU from MSETCL which will benefit the system and consumers and erection of Transmission Network by private companies shall be stopped.

#### ***MSETCL's Response***

2.1.2 MSETCL has responded as follows:

- **High Tariff and attributable reasons** - Transmission Charges are approved by the Commission after prudence check of all the parameters based on applicable Multi Year Tariff Regulations. In respect of efficiency, MSETCL is



achieving higher Transmission System Availability as compared to the benchmark specified by the Commission.

- **Delay in project execution** - project execution is a function of many uncontrollable parameters like Right of Way, Land acquisition, Rehabilitation and Resettlement, Forest Clearance, etc. and the schedule of execution and completion of certain projects result into delays on account of these issues.. Accordingly, delay in completion of EHV Line from Babhaleshwar to Mumbai is due to the factors beyond control of MSETCL as explained above.
- **High Transmission Charges** - the Transmission Charges are approved by the Commission after prudence check of all the parameters including the verification of the reasons for time/cost overrun based on applicable Multi Year Tariff Regulations.
- **High project cost vis-à-vis unutilized or under-utilized asset** - MSETCL executes all the projects based on STU plan and after approval of the Detailed Project Report (DPR) by the Commission for projects costing more than Rs. 10 Crore. The project works are awarded based on competitive bidding to the party quoting the lowest through highly advanced SRM e-tendering system after technical and commercial evaluation. As regards time and cost overrun, the delay in completion of projects is due to uncontrollable parameters like Right of Way, Land acquisition, Rehabilitation and Resettlement, Forest Clearance, etc. All assets viz. Sub-stations and Lines are constructed based on requirements, STU Plan and approval by the Commission after communication of the requirement by various DISCOMs.
- **Lack of Co-ordination among Transmission Licensees** - the STU being a nodal agency for planning of transmission network carries out various studies to develop an STU plan from time to time. This ensures coordination between various Transmission entities for augmentation of their network.
- **Compensation to farmers** - MSETCL makes appropriate and timely payments towards compensation to the affected farmers as per compensation policy of GoM and in accordance with the statutory provisions in this regard.
- **Permission from Collector for setting up Sub-stations** - MSETCL constructs Transmission Network viz. Sub-stations and Lines as per STU Plan after getting approvals from the Commission which is the duly appointed authority as per Electricity Act, 2003.

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

2.1.3 The Commission has noted MSETCL's response. The Commission approves the ARR of all Licensees based on Audited Annual Accounts and necessary prudence check in line with the applicable MYT Regulations, for the time being in force. Moreover,

Transmission related capital expenditure projects are proposed by Transmission Licensees based on the 5-year rolling STU plan as prepared by STU in consultation with Transmission Licensees and Distribution Licensees.

- 2.1.4 The Commission approves the capex schemes in-principle, as submitted by Transmission Licensees as per STU Plan, after analysis and limited prudence check in accordance with the capital investment guidelines of the Commission. At the time of approval, the Commission specifically directs Transmission Licences to execute the work on least cost basis through competitive bidding and complete the same within the stipulated time limit and estimated cost and put the asset to use for the benefit of the consumers. The Licensee is also directed to submit the scheme closure / completion report along with the justification of increase in actual cost vis-a-vis the approved cost, if any.
- 2.1.5 While these capex schemes are approved by the Commission, on submission by the Transmission Licensees after scrutiny and prudence check, the Transmission Licensees and the STU are obligated to undertake proper technical and financial planning with respect to least cost and timely completion, assess the requirement of the scheme for optimum use, ensure co-ordination amongst the Licensees of the Intra State Transmission Licensees (InSTS) and Inter State Transmission Licensees (ISTS) viz. PGCIL for smooth execution and completion of the project within the approved cost and timelines.
- 2.1.6 The Commission notes that there are certain schemes which have substantial time and cost over-run. Also, there are certain schemes which are completed but are either under-utilised or not utilised at all. Hence, the Commission has disallowed the capitalisation against such scheme after necessary prudence check, as these are not benefiting the consumers.
- 2.1.7 In respect of the scheme of 400 kV Line from Babhleshwar to Mumbai (Khudus), the Commission notes that the scheme was originally approved in-principle by the Commission in the year 2011. Thereafter, on account to change in the scope of work and increase in the estimated cost, MSETCL sought a revised approval in the year 2017. Accordingly, the Commission has accorded approval to the revised cost In-principle with specific directives to expedite the work under this scheme as well as verification of the actual cost of this scheme by an independent third party expert/institution. Further, MSETCL has not claimed any capitalisation towards this Transmission Line work as no assets are put to use. Moreover, the Commission will carry out the necessary prudence check including considering the recommendations of the third party expert/institution, in any, prior to approval of any capitalisation against this scheme as and when claimed by MSETCL.
- 2.1.8 In respect of the scheme of 400 kV Nashik Sub-station, the Commission notes that the scheme was originally approved in-principle by the Commission in the year 2014. Thereafter, on account to change in the scope of work and increase in the estimated

cost, MSETCL sought a revised approval in the year 2017. Accordingly, the Commission has accorded approval to the revised cost In-principle with specific directives to expedite the work under this scheme. Further, MSETCL has not claimed any capitalisation towards this scheme no assets are put to use. Moreover, the Commission will carry out the necessary prudence check prior to approval of any capitalisation against this scheme as and when claimed by MSETCL.

- 2.1.9 The Commission also directs the STU to submit the details of the un-utilised Sub-stations, Lines, Bays, etc. of all the Transmission Licensees which are a part of InSTS along with detailed justification for the non-utilisation and future action plan for such assets within three months from the date of this Order.
- 2.1.10 The Commission expects MSETCL to propose any capex scheme in consultation with STU, after necessary due diligence and considering the plan of other Transmission Licensees such as PGCIL and others to avoid duplication of network.

### 3 IMPACT OF DISALLOWED CAPITALISATION OF ASSETS FOR PREVIOUS YEARS

#### *MSETCL's Submission*

#### 3.1 Disallowed Capitalisation of Assets during FY 2010-11

- 3.1.1 Capitalization of Rs. 86.07 Crore claimed against wind power schemes was disallowed vide Order in Case No. 169 of 2011. An amount of Rs. 8.16 Crore out of Rs 86.07 Crore was allowed in the Review Petition in Case No. 106 of 2012 while the remaining amount of Rs. 77.91 Crore was disallowed since the payment was not made to the Developers.
- 3.1.2 Subsequently, payments were made to the Developers and MSETCL claimed Rs. 22.15 Crore out of total disallowed capitalization of Rs. 96.94 Crore for the FY 2010-11 in the MYT Petition in Case No. 31 of 2016. The entire capitalisation of Rs. 22.15 Crore was allowed vide MYT Order in Case No. 31 of 2016 in FY 2014-15 as the payments to Developers were made in that year.
- 3.1.3 Thereafter, MSETCL has made further payment of Rs. 15.33 Crore to Developers against which the approval of the Commission has been sought under the disallowed capitalisation for FY 2010-11 as shown in the Table below.

**Table 1: Claim for disallowed Capitalisation for FY 2010-11, as submitted by MSETCL (Rs. Crore)**

| FY 2010-11   | Case No. 169 of 2011 |                 | Approved in Case No. 106 of 2012 | Approved in Case No. 39 of 2013 | Approved in Case No. 207 of 2014 | Approved in Case No. 31 of 2016 | Balance to be claimed | Claimed in this Petition |
|--------------|----------------------|-----------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|-----------------------|--------------------------|
|              | Actual               | Approved        |                                  |                                 |                                  |                                 |                       |                          |
| DPR          | 2,010.42             | 1,676.47        | 182.80                           | 47.07                           | 101.25                           | 22.15                           | 74.79                 | 15.33                    |
| Non-DPR#     | 491.86               | 335.43          | 36.56                            | 9.41                            | 16.35                            |                                 |                       |                          |
| <b>Total</b> | <b>2,502.28</b>      | <b>2,011.90</b> | <b>219.36</b>                    | <b>56.48</b>                    | <b>117.60</b>                    | <b>22.15</b>                    | <b>74.79</b>          | <b>15.33</b>             |

- 3.1.4 MSETCL has computed the Depreciation, Interest on Long Term Loans, incentive for Transmission Availability and RoE due to the change in the Gross Fixed Assets (GFA), equity and loan on account of the claim of disallowed capitalisation.

#### 3.2 Disallowed Capitalisation of Assets during FY 2011-12

- 3.2.1 Capitalization of Rs. 46.52 Crore claimed in FY 2011-12 was disallowed vide Order in Case No. 39 of 2013 for 269 unutilized bays of 33/22/11 kV constructed in various Sub-stations.
- 3.2.2 Subsequently, on production of documentary evidence regarding utilization of 22 bays (i.e. 33 kV- 17 Nos. and 22 kV- 5 Nos.), the Commission allowed capitalization of Rs. 4.09 Crore vide Order in Case No. 207 of 2014.

3.2.3 MSETCL has further put to use 46 more bays claimed in FY 2011-12 at the cost of Rs 8.54 Crore and the corresponding amount is sought for capitalisation in the present Petition. The summary of the disallowed capitalization claimed for FY 2011-12 is shown in the Table below:

**Table 2: Claim for disallowed Capitalisation for FY 2011-12, as submitted by MSETCL (Rs. Crore)**

| FY 2011-12        | Case No. 39 of 2013 |                 | Disallowed Capitalisation | Approved in Case No. 207 of 2014 | Approved in Case No. 31 of 2016 | Balance to be claimed | Claimed in this Petition |
|-------------------|---------------------|-----------------|---------------------------|----------------------------------|---------------------------------|-----------------------|--------------------------|
|                   | Claimed             | Approved        |                           |                                  |                                 |                       |                          |
| DPR               | 1,967.69            | 1,921.17        | 46.52                     | 4.09                             | 5.02                            | 37.41                 | 8.54                     |
| Non-DPR           | 274.34              | 271.74          | 2.60                      | -                                | -                               | 2.60                  | -                        |
| Intangible assets | 19.50               | 19.50           | -                         | -                                | -                               | -                     | -                        |
| <b>Total</b>      | <b>2,261.53</b>     | <b>2,212.41</b> | <b>49.12</b>              | <b>4.09</b>                      | <b>5.02</b>                     | <b>40.01</b>          | <b>8.54</b>              |

3.2.4 MSETCL has computed the Depreciation, Interest on Long Term Loans, incentive for Transmission Availability and RoE due to the change in the GFA, equity and loan on account of the above claim for disallowed capitalisation.

### 3.3 Disallowed Capitalisation of Assets during FY 2012-13

3.3.1 Capitalization of Rs. 149.50 Crore was disallowed vide Order in Case No. 207 of 2014 for FY 2012-13 on account various reasons such as Non-utilization of 33/22 kV bays; scheme approved before March 2011 but having negligible capitalization; DPR not submitted; capitalization only on account of land development; civil work and cost over-run.

3.3.2 Capitalisation of Rs. 101.74 Crore was claimed in the MYT Petition in Case No. 31 of 2016 against which capitalisation towards three cost over-run schemes and one scheme comprising of civil work-related part was allowed by the Commission on the basis of justification provided by MSTECL.

3.3.3 MSETCL has now complied with the requirements and hence claimed part of this amount as set out below.

**Table 3: Break-up of claim for disallowed Capitalisation for FY 2012-13, as submitted by MSETCL (Rs. Crore)**

| Sr. No. | Particulars   | Amount |
|---------|---|--------|
| a)      | Capitalisation claimed on utilisation of 33/22/11 kV bays   | 10.29  |
| b)      | Scheme approved in-principle during or before March 2011 for which there is negligible capitalisation | 11.87  |
| c)      | Scheme having negligible capitalisation as per half yearly progress report                            | 0.59   |

| Sr. No. | Particulars   | Amount       |
|---------|---|--------------|
| d)      | DPR not submitted   | 17.47        |
| e)      | Part capitalization on account of land development, civil work etc. | 13.16        |
|         | <b>Total Capitalisation claimed</b>                                 | <b>53.37</b> |

3.3.4 The summary of the disallowed capitalisation claimed in the Petition is shown in the Table below:

**Table 4: Claim of disallowed Capitalisation for FY 2012-13, as submitted by MSETCL (Rs. Crore)**

| FY 2012-13                                    | Case No. 207 of 2014 |                   | Disallowed Capitalisation | Approved in Case No. 31 of 2016 | Balance to be claimed | Claimed in this Petition |
|---|----------------------|-------------------|---------------------------|---------------------------------|-----------------------|--------------------------|
|   | Claimed              | Approved          |                           |                                 |                       |                          |
| DPR   | 2,083.72             | 1,934.22          | 95.34                     | 26.67                           | 68.67                 | 43.08                    |
| Capitalisation disallowed for unutilized bays |                      | (1,988.38-54.16*) | 54.16                     | 14.67                           | 39.49                 | 10.29                    |
| <b>Total</b>                                  | <b>2,083.72</b>      | <b>1,934.22</b>   | <b>149.50</b>             | <b>41.34</b>                    | <b>108.16</b>         | <b>53.37</b>             |

Note: Past period disallowed capitalisation of Rs. 15.60 Crore approved in Case No. 207 of 2014 is not shown in the above table;

\* The amount of Rs. 54.16 Crore pertains to capitalisation disallowed due to non-utilisation of bays.

3.3.5 MSETCL has computed the Depreciation, Interest on Long Term Loans, incentive for Transmission Availability and RoE due to the change in the Gross Fixed Assets (GFA), equity and loan on account of the claim of disallowed capitalisation.

### 3.4 Disallowed Capitalisation of Assets during FY 2013-14

3.4.1 Capitalisation of Rs. 81.24 Crore was disallowed vide Order in Case No. 207 of 2014 for FY 2013-14 on account various reasons such as Non-utilization of 33/22 kV bays; scheme approved before March 2011 but having negligible capitalization; DPR not submitted; capitalization only on account of land development; civil work and cost over-run.

3.4.2 Capitalisation of Rs. 68.42 Crore was claimed in the MYT Petition in Case No. 31 of 2016 against which capitalisation of Rs. 7.94 Crore was allowed by the Commission.

3.4.3 MSETCL has now complied with the requirements and claimed a part of this amount as shown below.

**Table 5: Break-up of claim of disallowed Capitalisation for FY 2013-14, as submitted by MSETCL (Rs. Crore)**

| Sr. No. | Particulars   | Amount       |
|---------|---|--------------|
| a)      | Utilization of 33/22/11kV Bays (inclusive of not constructed & repeated Bays)                           | 3.35         |
| b)      | Scheme approved in-principally during or before March 2011 for which there is negligible capitalisation | 19.30        |
| c)      | Scheme having negligible capitalisation as per half yearly progress report                              | 11.31        |
| d)      | DPR not submitted   | 14.07        |
| e)      | Part capitalization on account of land development, civil work etc.                                     | 6.00         |
| f)      | Disallowance of capitalization due to cost overrun  | 3.89         |
|         | <b>Total Capitalisation to be claimed</b>   | <b>57.93</b> |

3.4.4 The summary of the disallowed capitalisation now claimed is shown in the Table below:

**Table 6: Claim of disallowed capitalisation for FY 2013-14, as submitted by MSETCL (Rs. Crore)**

| FY 2013-14                                    | Case No. 207 of 2014 |                     | Disallowed Capitalisation | Approved in Case No. 31 of 2016 | Balance to be claimed    | Claimed in this Petition |
|---|----------------------|---------------------|---------------------------|---------------------------------|--------------------------|--------------------------|
|   | Claimed              | Approved            |                           |                                 |                          |                          |
| Total Capitalisation                          | 1,571.52             | 1,490.28            | 62.00                     | 5.16                            | 56.84                    | 54.58                    |
| Capitalisation disallowed for unutilized bays |                      | (1,509.52 - 19.24*) | 19.24                     | 1.67                            | 17.57 <sup>#</sup>       | 3.35                     |
| <b>Total</b>                                  | <b>1,571.52</b>      | <b>1,490.28</b>     | <b>81.24</b>              | <b>7.94</b>                     | <b>74.41<sup>#</sup></b> | <b>57.93</b>             |

Note: Past period disallowed capitalisation of Rs. 1.70 Crore approved in Case No. 207 of 2014 is not shown in the above table.

<sup>#</sup> The values have been modified by the Commission based on approvals in the past Order and re-produced in the table.

\* The amount of Rs. 19.24 Crore pertains to capitalisation disallowed due to non-utilisation of bays.

3.4.5 MSETCL has computed the Depreciation, Interest on Long Term Loans, incentive for Transmission Availability and RoE due to the change in the Gross Fixed Assets (GFA), equity and loan on account of the claim of disallowed capitalisation.

### 3.5 Disallowed Capitalisation of Assets during FY 2014-15

3.5.1 Capitalisation of Rs. 1,383.81 Crore towards various DPR and Non-DPR schemes capitalized and claim towards unutilized bays being put to use for FY 2014-15 was

claimed in Petition in Case No. 31 of 2016. A capitalisation of Rs. 1307.08 Crore was approved against the same vide the Order in Case No. 31 of 2016.

- 3.5.2 In the present Petition, disallowed capitalization of Rs. 88.19 Crore for FY 2014-15 is claimed against disallowed capitalisation of Rs. 87.42 Crore as per the MYT Order as well as against capitalisation of Rs. 10.21 Crore disallowed due to non-utilisation of bays. Capitalisation against duplicate schemes and ORC schemes is not claimed. The detailed break-up of the amount claimed by MSETCL for capitalisation in FY 2014-15 is provided below:

**Table 7: Break-up of claim of disallowed Capitalisation for FY 2014-15, as submitted by MSETCL (Rs. Crore)**

| Sr. No. | Particulars  | Amount       |
|---------|--|--------------|
| A       | Disallowed due to negligible capitalisation, non-initiation or old schemes | 7.36         |
| B       | Time and Cost Over run   | 3.14         |
| C       | DPR not submitted  | 11.12        |
| D       | Cancelled schemes  | 19.22        |
| E       | Schemes initiated in MSEB period   | 0.60         |
| F       | Rejected Schemes   | 0.28         |
| G       | Ongoing schemes with incomplete information                                | 0.16         |
| H       | Schemes pertaining to capitalisation against civil work                    | 1.84         |
| I       | Schemes disallowed for non-compliance of Order No. 207 of 2014             | 42.61        |
| J       | Utilisation of Un-utilised bays  | 1.86         |
|         | <b>Total</b>   | <b>88.19</b> |

- 3.5.3 The summary of the disallowed capitalisation now claimed is shown in the Table below:

**Table 8: Claim of disallowed capitalisation for FY 2014-15, as submitted by MSETCL (Rs. Crore)**

| FY 2014-15                                    | Case No. 31 of 2016 |                  | Disallowed Capitalisation | Balance to be claimed | Claimed in this Petition |
|---|---------------------|------------------|---------------------------|-----------------------|--------------------------|
|   | Claimed             | Approved         |                           |                       |                          |
| Total Capitalisation                          | 1,383.81            | 1,273.79*        | 99.81                     | 99.81                 | 86.33                    |
| Capitalisation disallowed for unutilized bays |                     | (1,284.00-10.21) | 10.21                     | 10.21                 | 1.86                     |
| <b>Total</b>                                  | <b>1,383.81</b>     | <b>1,273.79</b>  | <b>110.02</b>             | <b>110.02</b>         | <b>88.19</b>             |

\* MSETCL has considered the fresh DPR and Non-DPR capitalisation approved in the order in Case No. 31 of 2016 and excluded Rs. 33.29 Crore of past disallowed capitalisation allowed in that Order for representation.



3.5.4 MSETCL has computed the Depreciation, Interest on Long Term Loans, incentive for Transmission Availability and RoE due to the change in the Gross Fixed Assets (GFA), equity and loan on account of the claim of disallowed capitalisation.

### 3.6 Summary of Impact of Disallowed Capitalisation

3.6.1 MSETCL has computed the impact of disallowed capitalisation of FY 2010-11 to FY 2014-15 on Depreciation including Additional Advance Depreciation (AAD), Interest on Long Term Loans, RoE and Incentive on Transmission Availability pertaining to such assets. The additional impact of such disallowed capitalisation has been computed as the difference between MSETCL's claim of Depreciation, Interest on Long Term Loans, RoE and incentive for Transmission Availability for FY 2010-11 to FY 2014-15 in this Petition and the amounts approved under these heads during Truing-up of FY 2012-13 and FY 2013-14 in the Order in Case No. 207 of 2014 and Truing up of FY 2014-15 in the Order in Case No. 31 of 2016.

**Table 9: Impact of disallowed Capitalisation for FY 2010-11 to FY 2014-15, as submitted by MSETCL (Rs. Crore)**

| Particulars   | FY<br>2010-11 | FY<br>2011-12 | FY<br>2012-13 | FY<br>2013-14 | FY<br>2014-15 | Total         |
|---|---------------|---------------|---------------|---------------|---------------|---------------|
| Difference in Interest on Long Term Loans                   | 0.60          | 1.56          | 3.89          | 8.88          | 15.05         | <b>29.97</b>  |
| Difference in RoE   | 0.21          | 0.55          | 1.42          | 3.29          | 5.56          | <b>11.03</b>  |
| Difference in incentive on Transmission System Availability | 0.01          | 0.09          | 0.10          | 0.33          | 0.00*         | <b>0.53</b>   |
| Difference in Depreciation including AAD                    | 0.00          | 2.95          | 0.00          | 4.12          | 6.90          | <b>13.97</b>  |
| <b>Total</b>  | <b>0.82</b>   | <b>5.15</b>   | <b>5.41</b>   | <b>16.62</b>  | <b>27.50*</b> | <b>55.50*</b> |

\* In the financial model, MSETCL has computed the differential incentive of Rs. 0.54 Crore for FY 2014-15 and hence total impact of Rs. 28.04 Crore for FY 2014-15 instead of Rs. 27.50 Crore. Consequently, the total impact of disallowed capitalisation for all years adds up to Rs. 56.04 Crore instead of Rs. 55.50 Crore. This difference is on account of incorrect linking of cells.

3.6.2 MSETCL has sought approval of the net Truing-up requirement due to the impact of disallowed capitalisation for past years, and proposes to include the revenue gap in the ARR for FY 2018-19.

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

#### **3.7 Disallowed capitalisation approved by the Commission**

3.7.1 In the past Truing-up Orders from FY 2010-11 to FY 2014-15, the Commission had disallowed certain capitalisation claimed by MSETCL for the various reasons set out by MSETCL above. Part of the disallowed capitalisation for past years was approved in the Orders in Case No. 39 of 2013, Case No. 207 of 2014 and the last MYT Order

in Case No. 31 of 2016. MSETCL has now claimed a further part of the disallowed capitalisation.

- 3.7.2 The details of these schemes and the cost-benefit analysis (CBA) reports submitted by MSETCL have been examined. For some schemes, MSETCL has sought approval for capitalisation in a particular year while other remarks or subsequent submissions indicate that the scheme was actually commissioned in a different year.
- 3.7.3 With regard to capitalisation of wind evacuation schemes, the Commission in its MTR Order in Case No. 207 of 2014 had ruled as below:

*“3.8.3 With regard to capitalisation of Wind Evacuation Schemes, the Commission in its Review Order in Case No. 79 of 2014 had ruled as below:*

*The Commission in the present proceeding is not considering the issue, while directing the Petitioner to submit appropriate details during the MYT Mid-Term Performance Review. The Commission would scrutinise the details submitted during the Mid-Term Performance Review to form a final view on the issue.*

*3.8.4 However, in the present Petition, MSETCL has not submitted any details pertaining to capitalisation of such Wind Evacuation Schemes for FY 2011-12. Hence, the Commission has not considered any capitalisation relating to such schemes in the present Order.”*

- 3.7.4 MSETCL submitted the details of payment to developers for the wind evacuation schemes and activities completed towards these schemes, and claimed capitalisation of Rs. 15.33 Crore in FY 2010-11 in its Petition. However, it is evident from the submissions that the payments to the developers were made in the years 2014, 2015 and 2016.
- 3.7.5 MSETCL has computed the capitalisation towards unutilised Bays considering the cost per Bay between Rs. 19 Lakh to Rs. 21.47 Lakh per bay, based on the estimated cost of such Bays in the overall scheme cost. While disallowing the cost against these Bays, the Commission had considered the per Bay cost of Rs. 18.57 Lakh, which it is now applying for capitalisation of the unutilised Bays now put to use.
- 3.7.6 MSETCL has claimed capitalisation of Capex schemes which were disallowed in FY 2012-13, FY 2013-14 and FY 2014-15 on account of the reasons set out by MSETCL above. In the MTR Order in Case No. 207 of 2014, MSETCL was asked to revisit the disallowed Capex schemes, submit a review report and obtain fresh approval of the Commission prior to initiating any activity under such schemes. MSETCL has not submitted any report. Hence, no capitalisation was allowed for these schemes in the MYT Order in Case No. 31 of 2016 except for capitalisation for 3 cost over-run schemes and one scheme for which there is civil work-related part capitalisation is allowed on the basis of justification provided in the Petition.

- 3.7.7 In the present Order the Commission has reviewed the capitalisation claimed now for capex schemes disallowed previously. MSETCL has claimed part capitalisation of Rs. 88.19 Crore for FY 2014-15 in its Petition however, on scrutiny of the corresponding excel formats, it is evident that it has actually claimed a capitalisation of Rs. 101.75 Crore against such schemes for FY 2014-15. The same is considered by the Commission in its analysis. It is observed that MSETCL has short-closed most of such schemes which are approved in-principle long back (approved in March, 2011 and before). The Commission sought details of the actual assets put to use against the capitalisation claimed for each scheme submitted and approved the disallowed capitalisation only for those schemes where the assets put to use are ascertained. The schemes where the capitalisation is claimed only on account of purchase of land, civil works and where no assets are put to use have been disallowed.
- 3.7.8 The Commission observes that MSETCL is not committed to expeditiously complete previously disallowed capex schemes and continues to claim part capitalisation towards such schemes well beyond the project timelines year after year in successive Petitions. Despite directives to undertake need-based Capex after assigning due priority to schemes in its successive Orders, MSETCL continues to project Capex as a shelf of schemes/projects without any prioritisation. Thus, schemes approved long back and which may have lost their relevance continue to be executed well beyond their approved timelines, and schemes which are actually necessary get deferred for want of administrative approvals, regulatory approval, funds, proper project management/execution, manpower and so on. This is not a healthy practice and should not be encouraged.
- 3.7.9 Further, the Commission in the past Orders has been allowing capitalisation against old capex schemes disallowed previously in the respective year of put to use based on the information submitted by MSETCL and necessary prudence check. Based on these approvals, MSETCL earns the ARR on such capitalisation till the useful life of the asset or its retirement, whichever is earlier. Therefore, the Commission observes that there is no real dis-incentive to MSETCL to not expeditiously execute and put the assets created under these schemes to use and this is corroborated by the fact that MSETCL has been claiming capitalisation against such old schemes in successive Petitions till date. Hence, the Commission is of the view that prima facie this is a fit case to create some dis-incentive that will induce discipline in the Licensees to undertake proper planning, execution and commissioning of capital expenditure projects.
- 3.7.10 In view of the foregoing, the Commission has first identified the year of actual put to use of assets based on the detailed scheme-wise discussion with MSETCL as well as inputs provided from its data records and field offices in respect of these schemes. Further, as against the practise followed in the past Orders for approving previously disallowed capitalisation in the year in which they were actually put to use, the Commission in the Order has decided to consider capitalisation for all schemes which

were put to use in the period from FY 2010-11 and FY 2014-15 in the FY 2015-16. Further, for such schemes, the Commission has computed the year-wise depreciation, from the year of disallowance (as per previous Orders) upto the year FY 2015-16 considering the depreciation rates approved for the respective years. For schemes whose put to use is ascertained in FY 2016-17 or expected in the subsequent years upto FY 2019-20, the Commission has computed the depreciation till such year of put to use in a similar manner. The total depreciation computed from the year of disallowance upto the year of put to use/ expected put to use is deducted from the claimed capitalisation amount to derive the net capitalisation (depreciated cost) against these schemes. This net capitalisation is considered for approval in the respective years from FY 2015-16 to FY 2019-20, as applicable. Considering that such previously disallowed capitalisation is now being allowed only from FY 2015-16, there is no impact of disallowed capitalisation computed for the years FY 2010-11 to FY 2014-15, separately. The approval of ARR elements pertaining to this capitalisation is dealt with in the respective year of capitalisation considered now, in the subsequent Sections of this Order.

**3.7.11 In light of the above discussion and in order to induce more discipline in planning and execution of capex schemes by MSETCL, the Commission takes a considered decision to provide a final opportunity to MSETCL to claim any balance capitalisation for previously disallowed schemes (disallowed upto FY 2014-15 vide Orders in Case No. 39 of 2013, Case No. 207 of 2014 and Case No. 31 of 2016) in the next Tariff proceedings after which no claims for approval of such capitalisation shall be allowed. MSETCL is directed to submit closure/completion reports for all such schemes along with the next Tariff Petition.**

3.7.12 Based on the foregoing discussion, the previously disallowed capitalisation approved by the Commission in this Order is shown in the Table below.

**Table 10: Disallowed Capitalisation approved by Commission (Rs. Crore)**

| Particulars                                     | MSETCL<br>Petition | Gross<br>Capitalisation<br>considered for<br>analysis by<br>Commission | Net<br>Capitalisation<br>approved in this<br>Order |
|---|--------------------|--|--|
| FY 2010-11                                      | 15.33              | -  | -  |
| FY 2011-12                                      | 8.54               | -  | -  |
| FY 2012-13                                      | 53.37              | -  | -  |
| FY 2013-14                                      | 57.93              | -  | -  |
| FY 2014-15*                                     | 88.19              | -  | -  |
| FY 2015-16                                      | -                  | 123.57   | 115.21   |
| FY 2016-17                                      | -                  | 26.84  | 23.03  |
| FY 2017-18                                      | -                  | 19.32  | 16.09  |
| FY 2018-19                                      | -                  | -  | -  |
| FY 2019-20                                      | -                  | 7.29   | 5.67   |
| <b>Total</b>                                    | <b>223.36</b>      | <b>177.03</b>  | <b>160.01</b>                                      |
| * MSETCL has acutally claimed Rs. 101.75 Crore. |                    |  |  |

*Note: The disallowed capitalisation approved in this Order for FY 2015-16 to FY 2019-20 is shown here for representation purpose. The impact is computed in the Sections pertaining to respective years in this Order.*

**3.7.13 The Commission approves previously disallowed capitalisation of Rs. 160.01 Crore, as against MSETCL's claim of Rs. 223.36 Crore. Considering that the previously disallowed capitalisation is being allowed only from FY 2015-16, there is no impact of disallowed capitalisation computed for the years FY 2010-11 to FY 2014-15, separately. The approval of ARR elements pertaining to this capitalisation is dealt with in the respective year of capitalisation considered now, in the subsequent Sections of this Order. The list of capex schemes disallowed previously against which capitalisation is claimed by MSETCL and is considered by the Commission for analysis and approval is at Appendix – 4.**

## 4 TRUING-UP OF ARR FOR FY 2015-16

### 4.1 Background

4.1.1 MSETCL has sought Truing-up of ARR for FY 2015-16 considering actual expenditure and revenue as per the audited accounts and in accordance with the MYT Regulations, 2011. It has submitted reasons for variations in the actual expenses for FY 2015-16 as compared to those approved in the MYT Order in Case No. 31 of 2016.

4.1.2 The analysis underlying the Commission's approval is set out below.

### 4.2 Operation & Maintenance Expenses

4.2.1 MSETCL has computed the O&M expenses in accordance with Regulation 61.5 of the MYT Regulations, 2011 which comprises Employee expenses, Administrative and General (A&G) expenses and Repairs and Maintenance (R&M) expenses. The summary of O&M expenses is as below:

**Table 11: O&M Expenses for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| O&M Expenses  | MYT Order | Normative | MSETCL Petition |
|---|-----------|-----------|-----------------|
| Employee Expenses   | 1,399.09  | 1,845.71  | 909.32          |
| A&G Expenses  |           |           | 190.74          |
| R&M Expenses  |           |           | 214.80          |
| <b>Total Operation &amp; Maintenance Expenses (Net of capitalisation)</b> |           |           | <b>1,314.87</b> |

4.2.2 The actual O&M expenses incurred are less than the normative. The reasons for major deviations in actual O&M expenses incurred in FY 2015-16 as compared to FY 2014-15 have been submitted.

4.2.3 MSETCL's submissions on each of these expenditure heads, and the Commission's analysis are detailed below.

### 4.3 Employee Expenses

#### *MSETCL's Submission*

4.3.1 The Employee expenses for FY 2015-16 are arrived at after taking into consideration the actual expenses (including prior period Employee Expenses) as per the audited accounts, expense capitalized and SLDC Employee Expense.

4.3.2 The Prior Period Employee Expenses are the Employee expenses which were finalised in FY 2015-16 and therefore, not claimed in the ARR of the previous years.

Prior Period Employee expenses are sought to be approved as a part of Net Employee Expenses.

- 4.3.3 The Basic Salary has increased by Rs. 22.80 Crore in FY 2015-16 as compared to FY 2014-15, which is attributed to promotions and annual increments.
- 4.3.4 Dearness Allowance (DA) has increased in FY 2015-16 over FY 2014-15 by Rs. 57.54 Crore on account of regular upward revision in the rate of DA which in turn has resulted in increase in salaries of staff. DA is a component of salary and is computed on the basic salary of employees. The weighted average DA rate for FY 2015-16 was 119% as against the weighted average DA rate of 105.92% applicable during FY 2014-15. MSETCL has submitted the applicable DA rates for FY 2010-11 to FY 2015-16 in its Petition.
- 4.3.5 Other allowances have increased by Rs. 73.69 Crore in FY 2015-16 as compared to FY 2014-15 on account of the following reasons:
- i. Medical Allowances – MSETCL has introduced mediclaim policy covering major diseases for its employees in FY 2015-16. An amount of Rs. 11.6 Crore approximately has been spent for the premium towards this mediclaim policy.
  - ii. Trainings – MSETCL has expanded its training for employees to various locations across the country which has resulted in increase in training cost by Rs. 3.18 Crore.
  - iii. Leave Encashment – Based on the actuarial valuation, MSETCL has considered an increase in provision of leave encashment to the tune of Rs. 59.02 Crore.
- 4.3.6 Provident Fund contribution has increased by Rs. 23.76 Crore in FY 2015-16 as compared to FY 2014-15. Provident Fund contribution being statutory payment increases with increase in Basic salary and accordingly is sought to be approved on actual as per the Audited Accounts for FY 2015-16.
- 4.3.7 The employee expenses for FY 2015-16 as submitted by MSETCL are shown in the Table below:

**Table 12: Employee Expenses for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| <b>Employee Expenses</b>                                       | <b>MSETCL<br/>Petition</b> |
|--|----------------------------|
| Gross Employee Expenses  | 996.09                     |
| Less: Expenses Capitalised                                     | 85.37                      |
| <b>Net Employee Expenses</b>                                   | <b>910.71</b>              |
| Less: SLDC Employee Expense                                    | 14.43                      |
| <b>Net Employee Expense after adjustment for SLDC Employee</b> | <b>896.28</b>              |

| <b>Employee Expenses</b>  | <b>MSETCL<br/>Petition</b> |
|---|----------------------------|
| <b>Expense</b>  |                            |
| Add: Prior Period Employee Expense  | 13.04                      |
| <b>Net Employee Expense after adjustment for SLDC and other<br/>Expense</b> | <b>909.32</b>              |

### *Commission's Analysis and Ruling*

4.3.8 The Commission has examined the component-wise comparison of actual Employee expenses for FY 2015-16 vis-a-vis FY 2014-15 submitted by MSETCL, as shown in the following Table:

**Table 13: Deviation analysis of Employee Expenses for FY 2015-16 (Rs. Crore)**

| <b>Particulars</b>                          | <b>FY<br/>2014-15</b> | <b>FY<br/>2015-16</b> | <b>Difference</b> |
|---|-----------------------|-----------------------|-------------------|
|   | <b>Actual</b>         | <b>Actual</b>         |                   |
| Basic Salary                                | 261.34                | 284.14                | 22.80             |
| Dearness Allowance (DA)                     | 276.12                | 333.66                | 57.54             |
| House Rent Allowance                        | 37.21                 | 32.55                 | (4.66)            |
| Earned Leave Encashment                     | 14.24                 | 7.87                  | (6.37)            |
| Other Allowances                            | 44.38                 | 118.07                | 73.69             |
| Medical Reimbursement                       | 2.36                  | 1.60                  | (0.76)            |
| Overtime Payment                            | 27.87                 | 30.70                 | 2.83              |
| Bonus/Ex-Gratia Payments                    | 11.91                 | 12.12                 | 0.21              |
| Staff welfare expenses                      | 4.09                  | 4.80                  | 0.71              |
| Payment under Workmen's<br>Compensation Act | 0.12                  | 0.18                  | 0.06              |
| Provident Fund Contribution                 | 58.65                 | 82.41                 | 23.76             |
| Pension Payments                            | 0.08                  | 0.08                  | (0.00)            |
| Gratuity Payment                            | 109.16                | 84.26                 | (24.90)           |
| Leave Encashment on Retirement              | 61.62                 | 3.64                  | (57.98)           |
| <b>Gross Employee Expenses</b>              | <b>909.15</b>         | <b>996.09</b>         | <b>86.94</b>      |

4.3.9 The Commission has examined the reasons for increase in Basic Salary, DA, Other Allowances, PF contribution etc. as well as the documentary evidence such as DA rate circulars, Audited Annual Accounts, Actuarial Valuation Report etc.

4.3.10 Increase in Basic Salary is on account of promotions and annual increments. The Commission accepts the reasons submitted by MSETCL for such increase and approves these elements as claimed by it.



- 4.3.11 The Commission accepts the DA as an uncontrollable factor since it is declared from time to time by the Government, and the Commission approves the DA as per MSETCL's submission.
- 4.3.12 Similarly, the Provident Fund contribution being statutory payment increases with increase in Basic salary and hence the Commission approves the contribution to PF as per MSETCL's submission.
- 4.3.13 In response to the break-up and justification sought for Other Allowances, MSETCL submitted that there is an increase in Other Allowances on account of premium paid for employee medi-claim policy, increase in trainings at multiple locations and leave encashment which is based on the actuarial valuation. These have been verified from the Audited Annual Accounts. Accordingly, the Commission approves the same.
- 4.3.14 The Commission has considered capitalised Employee expenses as per Audited Annual Accounts, and the MSLDC related Employee expenses as sought by MSETCL.
- 4.3.15 The Commission had explained the disallowance of prior period expenses as follows in Case No. 39 of 2013:

*“4.12.5. The Commission opines that such expenses, being O&M in nature, is not considered in this Order, as prudent O&M expenses of previous years were approved by the Commission in previous True-up Orders after detailed scrutiny. Allowing prior period O&M expenses in this Order will lead to approval of certain imprudent expenses disallowed previously. Similarly, prior period expenses on account of interest and finance charges need not be considered as interest expenses were approved in previous Orders on the basis of normative loan balance and considering prior period interest expenses will lead to approval of interest expenses over and above the normative interest, which is not desirable. Hence, the Commission disallows prior period expenses claimed by MSETCL in the Petition.”*

- 4.3.16 Similarly, the Commission had also not considered the prior period expenses in the Order in Case No. 207 of 2014 as well as MYT Order in Case No. 31 of 2016 and hence the Commission is not inclined to review the O&M expenses of previous years, which were approved by it in the respective Orders for previous Trued-up years after detailed scrutiny. Accordingly, the Commission disallows prior period employee expenses now claimed by MSETCL for FY 2015-16. The employee expenses approved by the Commission for FY 2015-16 are as shown in the Table below:

**Table 14: Employee Expenses approved by Commission for FY 2015-16 (Rs. Crore)**

| Particulars  | MTR<br>Petition | Approved in<br>this Order |
|--|-----------------|---------------------------|
| Gross Employee Expenses  | 996.09          | 996.09                    |
| Less: Expenses Capitalised   | 85.37           | 85.37                     |
| <b>Net Employee Expenses</b>   | <b>910.71</b>   | <b>910.71</b>             |
| Less: SLDC Employee Expense  | 14.43           | 14.43                     |
| <b>Net Employee Expense after adjustment<br/>for SLDC Employee Expense</b> | <b>896.28</b>   | <b>896.28</b>             |
| Add: Prior Period Employee Expense   | 13.04           | -                         |
| <b>Total Employee Expense</b>  | <b>909.32</b>   | <b>896.28</b>             |

**4.3.17 The Commission approves Net Employee Expenses of Rs. 896.28 Crore on Truing-up of ARR for FY 2015-16.**

#### **4.4 Administrative and General Expenses**

##### ***MSETCL's Submission***

4.4.1 MSETCL's assets base has been increasing since the past few years which directly impact various heads of A&G Expenses like electricity charges, vehicle hiring expenses and security expenses.

4.4.2 The increase in A&G expenses is mainly on account of following reasons:

- ***Increase in Electricity Charges:*** The electricity charges have increased in FY 2015-16 over FY 2014-15 due to increase in the asset base and increase in electricity Tariff of MSEDCL (vide order dated June 26, 2015 in Case No. 121 of 2014) has also contributed to the increase in electricity charges. Therefore, MSETCL has sought the increase in electricity charges of Rs 5.97 Crore based on the Audited Accounts.
- ***Increase in Professional, Consultancy and Technical Fees:*** Professional, Consultancy and Technical Fees have increased in FY 2015-16 over FY 2014-15 on account of two studies carried out by MSETCL for improvement initiatives. Details of the same are provided below:
- In FY 2015-16 expenditure was incurred for payment to M/s. Power Research & Development Consultancy (PRDC) for providing consultancy services for System Improvement & preparation of Road map for implementation of Smart Grid in MSETCL in respect of below activities:
  - a) Automated Fault Analysis System;
  - b) Dynamic Line Rating;

- c) High Tension Low Sag Conductor;
- d) Integrated Volt-Var Control;
- e) Energy Storage;
- f) City Monitoring System;
- g) Renewable Energy Management System;
- Further, a road map for implementation of Wide Area Measurement System (WAMS) in FY 2015-16 was prepared by MSETCL and was carried out by M/s. Power Research & Development Consultancy (PRDC). Accordingly, an increase of Rs. 3.47 Crore based on audited accounts is sought under this head.
- ***Increase in Purchase related advertisement expenses:*** A new e-tendering system for R&M works was implemented since December, 2015. During the implementation of e-tendering system certain difficulties were encountered which led to a poor response of the bidders which necessitated re-floating as well as extending the deadlines for a number of tenders which is generally accompanied by intimation of such extension/re-floating through advertisements. This led to increase in the advertisement expenses in FY 2015-16. Therefore, there is an increase of Rs 3.15 Crore in Purchase related advertisement expenses based on Audited Accounts.
- ***Decrease in IT related expenses / computer stationery:*** The overall IT related expenses have decreased as compared to the previous year. The change in the expenses is mainly contributed by cost towards SAP-ERP implementation; increased AMC charges; Upgradation / Software for Earthing design; Installation of OS and other applications; Recurring charges for NPLS bandwidth was higher in FY 2014-15. These changes in expenses have led to overall decrease of Rs. 4.29 Crore under this head in FY 2015-16.

4.4.3 The A&G expenses for FY 2015-16 as per the Audited Accounts with some adjustments as submitted by MSETCL are shown in the Table below:

**Table 15: A&G Expenses, as submitted by MSETCL for FY 2015-16 (Rs. Crore)**

| <b>Administrative and General Expense</b>                                | <b>MSETCL<br/>Petition</b> |
|--|----------------------------|
| Gross A&G Expenses   | 234.16                     |
| Less: Expenses Capitalised   | 37.98                      |
| <b>Net A&amp;G Expenses</b>  | <b>196.18</b>              |
| Less: SLDC A & G Expense   | 6.36                       |
| <b>Net A &amp; G Expense after adjustment for SLDC A &amp; G Expense</b> | <b>189.82</b>              |
| Less: RLDC Fees & WRPC charges   | -                          |

| <b>Administrative and General Expense</b>  | <b>MSETCL<br/>Petition</b> |
|--|----------------------------|
| <b>Net A&amp;G Expense after adjustment for RLDC Fees &amp; WRPC charges</b>     | <b>189.82</b>              |
| Prior Period Expense: Administration & Other Expenses                            | 0.92                       |
| <b>Net A&amp;G expense after considering administration &amp; other expenses</b> | <b>190.74</b>              |

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

4.4.4 The Commission has examined the component-wise comparison of actual A&G expenses for FY 2015-16 vis-a-vis FY 2014-15 submitted by MSETCL, as shown in the following Table:

**Table 16: Deviation analysis of A&G Expenses for FY 2015-16 (Rs. Crore)**

| <b>Particulars</b>                                  | <b>FY<br/>2014-15</b> | <b>FY<br/>2015-16</b> | <b>Difference</b> |
|---|-----------------------|-----------------------|-------------------|
|   | <b>Actual</b>         | <b>Actual</b>         |                   |
| Rent Rates & Taxes                                  | 20.51                 | 21.31                 | 0.80              |
| Insurance   | 3.63                  | 3.07                  | (0.57)            |
| Telephone & Postage, etc.                           | 4.45                  | 4.83                  | 0.38              |
| Legal charges & Audit fee                           | 1.12                  | 1.16                  | 0.05              |
| Professional, Consultancy, Technical fee            | 5.48                  | 8.96                  | 3.47              |
| Conveyance & Travel                                 | 7.98                  | 9.19                  | 1.21              |
| Electricity charges                                 | 46.95                 | 52.92                 | 5.97              |
| Water charges                                       | 5.07                  | 4.53                  | (0.54)            |
| Security arrangements                               | 46.35                 | 47.92                 | 1.57              |
| Fees & subscription                                 | 7.78                  | 7.59                  | (0.19)            |
| Books & periodicals                                 | 0.07                  | 0.05                  | (0.01)            |
| Computer Stationery / IT and communication expenses | 17.11                 | 12.82                 | (4.29)            |
| Printing & Stationery                               | 2.30                  | 2.92                  | 0.62              |
| Advertisements                                      | 0.29                  | 0.33                  | 0.04              |
| Purchase Related Advertisement Expenses             | 5.35                  | 8.50                  | 3.15              |
| License Fee and other related fee                   | 0.11                  | 0.10                  | (0.01)            |
| Vehicle Running Expenses Truck / Delivery Van       | 5.94                  | 4.99                  | (0.95)            |
| Vehicle Hiring Expenses Truck / Delivery Van        | 14.30                 | 16.09                 | 1.79              |
| Freight On Capital Equipment                        | 0.99                  | 0.05                  | (0.94)            |
| Miscellaneous Expenses                              | 0.22                  | 0.46                  | 0.24              |
| Office Expenses                                     | 9.71                  | 9.23                  | (0.48)            |
| Other Expenses                                      | 16.12                 | 17.13                 | 1.01              |
| <b>Total</b>  | <b>221.84</b>         | <b>234.16</b>         | <b>12.33</b>      |

- 4.4.5 The Commission notes that there is significant increase in electricity charges, consulting fees and purchase related advertisement expenses, the reasons for which have been provided by MSETCL vide response to data gaps and also re-iterated in its revised Petition. Break up of Miscellaneous Expenses, Office Expenses and Other Expenses under broad heads for FY 2015-16 has also been submitted vide response to data gaps. The Commission has analysed the reasons provided for deciding if the cost deviations have resulted from uncontrollable factors.
- 4.4.6 MSETCL has claimed that the increase in electricity charges is due to increase in asset base and in the electricity Tariff. The Commission concludes that, as a result of the increase in consumption at new asset facilities, the increase in retail Tariffs, etc., the increased expenditure was inevitable. Hence, the Commission has approved it as submitted by MSETCL.
- 4.4.7 The professional, consultancy and technical fees have increased on account of two technical studies commissioned by MSETCL. The Commission accepts that expenses towards technological advancement are required from time to time and approves the same as submitted by MSETCL.
- 4.4.8 The Commission notes that the purchase related advertisement expenses have increased on account of issues pertaining to the e-tendering system which caused inadequate response from vendors. This necessitated re-tendering and timeline extensions for multiple tenders and its intimation through advertisements. Hence, the increase in cost. The Commission also notes that online procurement platforms such as e-tendering are expected to increase the transparency of the process, ensure wider participation and competition, smoothen the procurement process and also reduce the time taken to complete the same. Contrary to that, the operational issues in the new e-tendering system implemented by MSETCL for R&M activities have resulted in expenditure which could have been avoided under normal circumstances. The Commission expects that these issues would have been appropriately addressed by MSETCL and should not arise in the future. Considering the fact that a new system was being implemented by MSETCL which has a possibility of teething issues, the Commission has considered this increase as a one-time cost impact and approved the same as submitted by MSETCL. Such increases may not be considered by the Commission in future.
- 4.4.9 The IT related expenses / computer stationery expenses were lower in FY 2015-16 as compared to FY 2014-15 and the Commission has approved it as submitted by MSETCL.
- 4.4.10 The Commission has considered capitalised A&G expenses as per Audited Annual Accounts, and the MSLDC related A&G expenses as sought by MSETCL.

4.4.11 The rationale for disallowance of prior period expenses has been dealt with at paras. 4.3.15 and 4.3.16 of this Order. Accordingly, the Commission has not considered the prior period A&G expenses claimed by MSETCL.

4.4.12 Accordingly, the Commission approves the A&G expenses as per the following Table.

**Table 17: A&G Expenses approved by Commission for FY 2015-16 (Rs. Crore)**

| Particulars   | MTR<br>Petition | Approved in<br>this Order |
|---|-----------------|---------------------------|
| Gross A&G Expenses  | 234.16          | 234.16                    |
| Less: Expenses Capitalised  | 37.98           | 37.98                     |
| <b>Net A&amp;G Expenses</b>   | <b>196.18</b>   | <b>196.18</b>             |
| Less: SLDC A & G Expense  | 6.36            | 6.36                      |
| <b>Net A &amp; G Expense after adjustment for<br/>SLDC A &amp; G Expense</b>                        | <b>189.82</b>   | <b>189.82</b>             |
| Add: Prior Period A&G Expenses  | 0.92            | -                         |
| <b>Total A&amp;G expense</b>  | <b>190.74</b>   | <b>189.82</b>             |
| <i>* RLDC Fees and WRPC charges are shown separately and hence not included in A&amp;G expenses</i> |                 |                           |

4.4.13 The Commission approves Net A&G Expenses of Rs. 189.82 Crore on Truing-up of ARR for FY 2015-16.

## 4.5 Repairs and Maintenance Expenses

### *MSETCL's Submission*

4.5.1 The R&M expenses for FY 2015-16 are arrived at after taking into consideration the actual R&M expenses as per the audited accounts, expenses capitalized and MSLDC R&M expenses.

4.5.2 The major reason for decrease in R&M expenses in FY 2015-16 as compared to FY 2014-15 are as follows:

- The number of failure of EHV power transformers in FY 2015-16 has reduced to 8 as compared to 22 in FY 2014-15.
- MSETCL has framed a policy for Life Extension schemes since February 2016 which includes replacement of old switchyard equipment. These old equipment have been replaced by new equipment which has resulted in reduction in the failure of various switchyard equipment and thereby reduced the R&M expenditure. Total Equipment failure in No. (EHV, CTs, PTs, CBs) in FY 2014-15 was 92, in FY 2015-16 it was 74 and in FY 2016-17 it was 52.

- MSETCL has implemented e-tendering system for R&M works since December, 2015. As there were certain difficulties in implementing the e-tendering system, it has led to reduction in R&M works during FY 2015-16.

4.5.3 The Prior Period R&M expense claimed in the present Petition comprises of 'Operating Expenses of Previous years', 'Material related expenses of previous years' and 'Other income related to prior period' of R&M nature. These expenses were finalised in FY 2015-16 and therefore, not claimed in the ARR of the previous years.

4.5.4 The R&M expenses for FY 2015-16 as submitted by MSETCL are shown in the following Table.

**Table 18: R&M Expenses, as submitted by MSETCL for FY 2015-16 (Rs. Crore)**

| <b>Repair and Maintenance Expense</b>                                | <b>MSETCL<br/>Petition</b> |
|--|----------------------------|
| Gross R&M Expenses   | 187.62                     |
| Less: Expenses Capitalised   | 0.50                       |
| <b>Net R&amp;M Expenses</b>  | <b>187.12</b>              |
| Less: SLDC R&M Expense   | 1.03                       |
| <b>Net R&amp;M Expense after adjustment for SLDC R&amp;M Expense</b> | <b>186.09</b>              |
| Prior Period R&M expenses  | 28.71                      |
| <b>Net R&amp;M Expenses (after adjustments)</b>                      | <b>214.80</b>              |

### *Commission's Analysis and Ruling*

4.5.5 The Commission has examined the component-wise comparison of actual R&M expenses for FY 2015-16 vis-a-vis FY 2014-15 submitted by MSETCL, as shown in the following Table:

**Table 19: Deviation analysis of R&M Expenses for FY 2015-16 (Rs. Crore)**

| <b>Particulars</b>     | <b>FY<br/>2014-15</b> | <b>FY<br/>2015-16</b> | <b>Difference</b> |
|------------------------|-----------------------|-----------------------|-------------------|
|                        | <b>Actual</b>         | <b>Actual</b>         |                   |
| Plant and Machinery    | 216.00                | 115.34                | (29.93)           |
| Building Expense       |                       | 4.59                  |                   |
| Civil Expense          |                       | 34.69                 |                   |
| Hydraulic Work expense |                       | 0.19                  |                   |
| Line expense           |                       | 21.17                 |                   |
| Others                 |                       | 10.10                 |                   |
| Vehicles               | 0.80                  | 0.59                  | (0.21)            |
| Furniture and Fixtures | 0.05                  | 0.03                  | (0.02)            |
| Office Equipment       | 1.21                  | 0.93                  | (0.28)            |

| Particulars                   | FY<br>2014-15 | FY<br>2015-16 | Difference     |
|-------------------------------|---------------|---------------|----------------|
|                               | Actual        | Actual        |                |
| <b>Gross R&amp;M Expenses</b> | <b>218.07</b> | <b>187.62</b> | <b>(30.45)</b> |

- 4.5.6 The Commission has examined the submission of MSETCL in respect of R&M expenses including reasons for reduction in these expenses as compared to the previous year, along with the Audited Annual Accounts and has considered the amount booked in the Audited Annual Accounts for the approval of R&M expenses.
- 4.5.7 The Commission has considered capitalised R&M expenses as per the Audited Annual Accounts, and the MSLDC related R&M expenses as per MSETCL's submissions.
- 4.5.8 Vide response to data gaps, MSETCL submitted a break up of prior period R&M expenses as follows:
- Other Income related to prior period – Rs. 9.15 Crore
  - Operating Expenses of Previous years – Rs. 18.56 Crore
  - Material related expenses of previous years – Rs. 1.00 Crore
- 4.5.9 On further query regarding the reason for prior period income being added to expenses, MSETCL clarified that MSETCL has created a general ledger for “Other income related to prior period” for booking of prior period income as well as adjustment/withdrawal of prior period income. At the end of the year, net balance of the booking and adjustment/withdrawal of prior period income is reflected in the annual accounts. Therefore, due to the netting off effect of the booking and adjustments, this general ledger reflects a debit balance and therefore is considered as an expense.
- 4.5.10 The rationale for disallowance of prior period expenses has been dealt with in the MTR Order, and at paras. 4.3.15 and 4.3.16 of the present Order. Accordingly, the Commission has disallowed the prior period R&M expenses claimed by MSETCL.
- 4.5.11 The Commission also notes the submission of MSETCL regarding the reduction in the R&M works during FY 2015-16 on account of certain difficulties in implementing the e-tendering system which led to reduction in R&M expenses.
- 4.5.12 The R&M expenses approved by the Commission are as per the following Table.



**Table 20: R&M Expenses approved by Commission for FY 2015-16 (Rs. Crore)**

| Particulars  | MTR<br>Petition | Approved in<br>this Order |
|--|-----------------|---------------------------|
| Gross R&M Expenses   | 187.62          | 187.62                    |
| Less: Expenses Capitalised   | 0.50            | 0.50                      |
| <b>Net R&amp;M Expenses</b>  | <b>187.12</b>   | <b>187.12</b>             |
| Less: SLDC R&M Expense   | 1.03            | 1.03                      |
| <b>Net R&amp;M Expense after adjustment for<br/>SLDC R&amp;M Expense</b> | <b>186.09</b>   | <b>186.09</b>             |
| Add: Prior Period R&M expenses   | 28.71           | -                         |
| <b>Net R&amp;M Expenses</b>  | <b>214.80</b>   | <b>186.09</b>             |

4.5.13 The Commission approves net R&M Expenses of Rs. 186.09 Crore on Truing-up of ARR for FY 2015-16.

#### 4.6 Normative and Actual O&M Expenses

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

- 4.6.1 The Commission has considered the closing balance of actual Bays and Ckt. Km. approved in the MYT Order in Case No. 31 of 2016 for FY 2014-15 as the opening balance for FY 2015-16. The Bays of past years on which capitalisation was previously disallowed but approved in this Order are also included in the opening balance. The Bays and Ckt. Km. added during the year are also considered.
- 4.6.2 The Commission approves the normative O&M expenses based on the actual Bays and Ckt. Km. in FY 2015-16 and the actual O&M expenses for FY 2015-16 as discussed in earlier paragraphs, as per the following Table.

**Table 21: Normative and Actual O&M Expenses for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars                          | MYT<br>Order    | MTR<br>Petition | Approved in<br>this Order |
|--------------------------------------|-----------------|-----------------|---------------------------|
| <b>Normative O&amp;M Expenses</b>    | <b>1,399.10</b> | <b>1,845.71</b> | <b>1,585.51</b>           |
| <b>Actual O&amp;M Expenses</b>       |                 |                 |                           |
| Employee Expense                     |                 | 909.32          | 896.28                    |
| A&G Expense                          |                 | 190.74          | 189.82                    |
| R&M Expense                          |                 | 214.80          | 186.09                    |
| <b>Total Actual O&amp;M Expenses</b> | <b>1,399.10</b> | <b>1,314.87</b> | <b>1,272.20</b>           |

- 4.6.3 The Commission approves the normative O&M Expenses of Rs. 1,585.51 Crore and actual O&M Expenses of Rs. 1,272.20 Crore prior to sharing of efficiency gain/loss, on Truing-up of ARR for FY 2015-16.

## 4.7 Capital Expenditure and Capitalisation

### *MSETCL's Submission*

4.7.1 Capitalisation of Rs. 1,638.72 Crore was approved in the Order in Case No. 31 of 2016 considering only those schemes which were approved in-principle. In the present Petition a Capitalisation of Rs. 2,128.86 Crore is claimed based on actual capitalization during the year. The break-up of the capitalisation is as shown in the following table:

**Table 22: Break up of Capitalisation for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Sr. No. | Particulars   | Amount          |
|---------|---|-----------------|
| 1       | Capitalisation as per Books                                     | 2,150.70        |
| 2       | Less: SLDC Capitalisation                                       | 2.12            |
| 3       | Less: Capitalisation claimed under Out Right Contribution (ORC) | 19.69           |
| 4       | Less: Capitalisation claimed under TSP                          | 0.03            |
|         | <b>Total Capitalisation claimed in the revised petition</b>     | <b>2,128.86</b> |

4.7.2 The capitalization has been higher than that approved previously by the Commission due to rigorous efforts and follow-up by MSETCL in resolving issues such as RoW and related court cases, requirement of forest clearances in some schemes, delay in land acquisition, delay in availability of police protection, permissions required from Railways, availability of outages etc.

**Table 23: Capitalisation for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars  | MYT Order       | MSETCL Petition |
|--------------|-----------------|-----------------|
| DPR          | 1,534.24        | 1,982.86        |
| Non-DPR      | 104.48          | 146.00          |
| <b>Total</b> | <b>1,638.72</b> | <b>2,128.86</b> |

### *Commission's Analysis and Ruling*

4.7.3 The Commission notes MSETCL's submission regarding the higher actual capitalisation during FY 2015-16 on account of the dedicated efforts and follow-up by MSETCL. Considering that execution of the capex schemes is phased across multiple years of the Control Period, the Commission has analysed the capital expenditure and capitalisation details submitted for all years from FY 2015-16 to FY 2019-20 in this Section and discussed its approach for approval of the capitalisation across these years.

- 4.7.4 The Commission is, however, concerned about the overall delay in execution and completion of approved capital expenditure schemes. This not only affects the development of the Transmission network, but also means that MSETCL's revenue recovery gets delayed and in turn affects its financial position to undertake further network development. Alternatively, such delay causes escalation in project costs and MSETCL recovers higher revenue (eventually from end consumers) than actually required during the year. The Commission had observed a similar position in its previous two Orders.
- 4.7.5 Despite directives to undertake need-based Capex after assigning due priority to schemes in its successive Orders, MSETCL continues to project Capex as a shelf of schemes/projects without any prioritisation. Thus, schemes approved long back and which may have lost their relevance continue to be executed well beyond their approved timelines, and schemes which are actually necessary get deferred for want of administrative approvals, regulatory approval, funds, manpower and so on.
- 4.7.6 According to MSETCL, the main reasons for delay were RoW issues and related Court cases, requirement of Forest clearances in some schemes, delay in land acquisition, delay in availability of police protection, permissions required from Railways, availability of outages, etc. These issues are not peculiar or unique to MSETCL but are common to most Transmission projects. The performance shows that MSETCL failed to consider them adequately at the planning stage and while estimating time-lines and work sequences. In its Annual Performance Review (APR) Order for MSETCL for FY 2007-08 (Case No. 70 of 2007), the Commission had observed as follows:
- “However, the Commission would like to reiterate that in-principle approval of the scheme does not absolve the senior management of MSETCL of their responsibility to prioritise various schemes and undertake cost benefit analysis and financial analysis to validate the commercial prudence of each scheme. MSETCL should ensure that the projected benefits actually accrue for the benefit of the stakeholders. It would be essential to monitor progress of each scheme as well as track expenditure and benefits accrued as per the scheme.”*
- 4.7.7 The Commission reiterates these observations. The Commission is concerned regarding the time taken for the schemes, as against the phasing initially envisaged by MSETCL and/or approved by the Commission. As evident from the historical performance of MSETCL in this respect, it is observed that there are hardly any schemes which are completed within the stipulated timelines on account of repetitive reasons such RoW issues, clearances, permissions, contractual issues etc. which are not unique to it.
- 4.7.8 While approving the capitalisation for DPR schemes, the Commission has considered the schemes submitted by MSETCL on actuals for FY 2015-16 and FY 2016-17 and projections for FY 2017-18 to FY 2019-20, in respect of which in-principle approval

has been granted or whose DPRs have been submitted for in-principle approval. The DPR schemes approved were scrutinized based on the Cost Benefit Analysis (CBA) reports and most recent half yearly progress report and the current status of these schemes was also verified by the Commission.

- 4.7.9 The Commission observes that most of the schemes approved prior to FY 2012-13 but were still under execution have now been short-closed by MSETCL. Capitalisation against such schemes is claimed based on put to use of assets in respective years. Some of these schemes are still work in progress and capitalisation is claimed based on put to use of assets in respective years. The Commission has scrutinized the details of assets put to use for each of these schemes and allowed capitalisation against them based on the respective year of capitalisation. Cost over-run was observed in some of these schemes for which detailed justification was sought from MSETCL, which was submitted. One of the reasons for cost over-run is the time lag between the approval and actual execution of the scheme on account of which the approval of the capital expenditure scheme was done at historical rates whereas the actual cost incurred during execution was much higher at current rates. Also, despite repeated directives issued while approving capex schemes in-principle, MSETCL has not updated its Standard of Rates (SoR) (generally referred to as cost data) as per the prevailing market rates. Other reasons for delay and cost over-run include RoW issues and related Court cases, price and quantity variation, requirement of Forest clearances in some schemes, delay in land acquisition, delay in availability of police protection, permissions required from Railways, availability of outages, etc. The Commission has approved capitalisation against such schemes after detailed scrutiny and prudence check, in the year of actual put to use / expected put to use of assets. **However, MSETCL should first seek a fresh prior approval for such schemes in case any further capitalisation is to be claimed in future.**
- 4.7.10 The Commission has adopted a similar approach for approval of the capitalisation for the rest of the DPR schemes approved in FY 2012-13 and thereafter. Further, MSETCL should submit a detailed Cost-Benefit Analysis report along with details of assets put to use including the date/year, in the prescribed formats, for each scheme against which it seeks capitalisation in future. Moreover, details of time and cost over-run, if any, including break-up of the cost over-run on account of reasons such as RoW compensation, IDC, price variation, quantity variation among others should also be submitted.
- 4.7.11 There are 12 schemes for which DPR is yet to be submitted for in-principle approval. The Regulation 23.5 of the MYT Regulations, 2015 specifies as under:

*“23.5 The Commission may approve, for each year of the Control Period, an additional amount equivalent to 20% of the total capital expenditure approved for that year, towards planned or unplanned capital expenditure that is yet to be approved by the Commission.”*

- 4.7.12 In accordance with the aforementioned provision of the MYT Regulations, 2015, the Commission has provisionally approved the capitalisation claimed against these schemes which is within the 20% ceiling specified in the Regulations, subject to True up. **MSETCL is directed to submit the DPR seeking in-principle approval for these schemes within three months from this Order, complete in all respects such as demand from the Distribution Licensee, technical study, consent of the STU, analysis of least cost alternatives and rates as per the latest SoR etc. In case MSETCL fails to do so, the capitalisation approved against such schemes shall be entirely disallowed in the subsequent Tariff proceedings, along with holding cost.**
- 4.7.13 There are 5 DPR schemes with cost over-run on account of delay, cost escalation due to price and quantity variation, RoW issues, outages as well as change in scope; for which no justification has been submitted despite being sought repeatedly. The Commission has disallowed any cost over-run over and above the approved DPR cost of these schemes. No capitalisation towards these schemes shall be allowed in future.
- 4.7.14 There are 36 DPR schemes for which capitalisation is claimed against the cost of land and civil work; site survey; partial Transmission Line and Bay work; Sub-station is back charged (charged at lower voltage as source as the Transmission Line work is not complete); line is charged but Sub-station work is incomplete; in-principle approval is not sought etc. Further, it is observed that while MSETCL claims part capitalisation against the assets however, these are not being put to use mainly on account of following reasons:
- a) The work related to the Sub-station is completed but the source Transmission Line is not complete and hence there is no utilisation of the Sub-stations assets;
  - b) The work related to the Sub-station and source Transmission Line is completed however, down stream EHV network of MSETCL to evacuate power is not completed;
  - c) The Sub-station, source Transmission Line and down stream EHV network of MSETCL to evacuate power are completed however, the network of the Distribution Licensee is not ready. Hence, the entire EHV assets gets stranded;
  - d) HV and EHV Bays are commissioned but not in use;
- .
- 4.7.15 As no assets have been put to use for these schemes, the Commission has disallowed the capitalisation towards these schemes. **From the foregoing discussion, it is evident that there are combined capex schemes involving both Sub-stations and associated Transmission Lines where the Sub-station work gets completed however, the work related to the associated Transmission Line remains pending on account of reasons such as ROW issues and related court cases, permission from authorities, contractual issues etc. In such cases MSETCL claims capatilisation stating that the work pertaining to the Sub-station is completed however, the entire asset does not get utilised. Therefore, in order prevent such**

**instances of non-utilisation of assets and also optimise costs, MSETCL shall execute the scope of work pertaining to both the Transmission Line and Sub-station simultaneously giving a higher priority to Transmission Line related works as in most cases the delay in observed in the execution of the Transmission Lines.**

4.7.16 Out of these 36 schemes, there are 18 schemes (for example 220 kV Narsi Sub-station, 220 kV Warud Sub-station, 220 kV Lonand MIDC Sub-station; 110 kV Miraj – Jaisingpur Line) for which the Commission had approved part capitalisation up to FY 2014-15 in its previous Orders. Since no assets have been put to use against these schemes, the Commission has disallowed the cumulative capitalisation of Rs. 125.74 Crore approved up to FY 2014-15 over and above the capitalisation claimed for future years (FY 2015-16 to FY 2019-20) for these schemes. This disallowed capitalisation has been adjusted in the opening GFA of FY 2015-16 for the purpose of computation of the ARR components.

4.7.17 The previously disallowed capitalisation allowed now for the years from FY 2015-16 to FY 2019-20 is included in the addition to capitalisation during the respective year.

4.7.18 The non-DPR capitalisation for each year from FY 2015-16 to FY 2019-20 is considered as submitted by MSETCL, subject to a cap of 20% of the DPR capitalisation approved in this Order.

**4.7.19 The list of capex schemes against which capitalisation is claimed by MSETCL (for the period from FY 2015-16 to FY 2019-20) and is considered by the Commission for analysis and approval is at Appendix – 5.**

4.7.20 The following Table summarizes the capitalisation approved/disallowed for FY 2014-15 to FY 2019-20.

**Table 24: Summary of Capitalisation for FY 2015-16 to FY 2019-20, considered by Commission (Rs. Crore)**

| Particulars                    | No.of Schemes | Cummulative capitalisation up to FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |
|--------------------------------|---------------|---|------------|------------|------------|------------|------------|
| DPR Capitalisation Allowed     | 584           | -   | 1,843.35   | 1,521.82   | 1,140.35   | 920.04     | 1,360.00   |
| Non-DPR Capitalisation Allowed | 400           | -   | 146.00     | 120.44     | 79.76      | 184.01     | 34.80      |
| DPR Capitalisation Dis-allowed | 36            | 125.74                                      | 111.34     | 38.03      | (0.91)     | 100.01     | 35.90      |

4.7.21 In the MYT Order in Case No. 31 of 2016 the Commission had noted that it is not satisfied with the quality of capitalisation related information being provided by MSETCL in its Tariff Petitions, which reflects poorly on the manner in which the information is being maintained by MSETCL itself. Incomplete or inaccurate information affects the decision-making process and the Commission is constrained to

base its decisions on the information available. The Commission re-iterates these observations and directs MSETCL to submit complete accurate and complete information

- 4.7.22 The capitalisation for FY 2015-16 approved by the Commission after prudence check is given in the Table below:

**Table 25: Capitalisation for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order | MTR Petition    | Approved in this Order |
|--|-----------|-----------------|------------------------|
| DPR Capitalisation   | 1,638.72  | 1,982.86        | 1,843.35               |
| Non-DPR Capitalisation   |           | 146.00          | 146.00                 |
| Add: Past period disallowed capitalisation approved in FY 2015-16* |           | -               | 115.21                 |
| <b>Total Approved Capitalisation</b>                               |           | <b>2,128.86</b> | <b>2,104.55</b>        |

*\* Part of the disallowed capitalisation claimed by MSETCL in the past years (FY 2010-11 to FY 2014-15) are considered for approval in FY 2015-16 by the Commission.*

- 4.7.23 **The Commission approves capitalisation of Rs. 2,104.55 Crore on Truing-up of ARR for FY 2015-16. This includes capitalisation of Rs. 115.21 Crore approved now towards previously disallowed schemes for past years (FY 2010-11 to FY 2014-15), in FY 2015-16.**

## 4.8 Depreciation

### *MSETCL's Submission*

- 4.8.1 Opening GFA for FY 2015-16 is considered as the closing GFA for FY 2014-15 approved by the Commission; after considering the impact of disallowed capitalization for FY 2010-11 to 2014-15. Depreciation has been calculated considering the average depreciation rate of 3.28% (i.e. computed average rate considering the depreciation and average GFA during the year as per the audited accounts). The impact of FRP Scheme on Fixed Assets as per annual accounts for FY 2015-16 is considered to derive the depreciation rate of 3.28%.
- 4.8.2 The Government of Maharashtra has notified "Maharashtra Electricity Reforms Transfer (First Amendment) Scheme 2016" on 31 March, 2016. As per the scheme, the fixed assets taken over by the Government of Maharashtra shall be considered to have been transferred to the MSETCL at the market value prevailing on 5 June, 2005. Pursuant to this notification, Net Fixed Assets of MSETCL increased by an amount Rs. 6,288.93 Crore (i.e. difference between old net fixed asset value and new net fixed asset value) in FY 2015-16.
- 4.8.3 Further, Regulation 27.9 of MYT Regulations, 2011 provides for passing on the benefit of revaluation of assets of a Transmission Licensee to its long term Transmission System Users in case such revaluation does not affect the Tariff

adversely. In view of FRP scheme, assets of MSETCL have been adjusted. However, in line with Regulation 27.9 and directive of the Holding company vide letter no. MSEBHCL/FRP/269 dated 7 July 2015, MSETCL has reduced the amount of Rs.6,288.93 Crore from the closing net fixed asset and corresponding depreciation of Rs.135.74 Crore for FY 2015-16 while computing ARR. The asset class-wise break up of depreciation computed on account of FRP scheme is provided as under:

**Table 26: Depreciation on account of FRP scheme for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Sr. No. | Particulars                            | Depreciation  |
|---------|--|---------------|
| 1       | Sub-Station                            | 38.23         |
| 2       | Buildings                              | 37.92         |
| 3       | Hydraulic works                        | 0.00          |
| 4       | Civil Works                            | 1.41          |
| 5       | Lines                                  | 95.43         |
| 6       | Vehicles                               | 0.01          |
| 7       | Furniture & fixtures                   | 0.00          |
| 8       | Computer/printer/UPS/peripherals       | 0.01          |
| 9       | Fax Machine                            | 0.36          |
| 10      | Water Cooler                           | 0.04          |
| 11      | Air conditioner                        | 0.02          |
| 12      | Amortisation of Leasehold land Assets  | 0.00          |
| 13      | <b>Total</b>                           | <b>173.44</b> |
| 14      | Less: FRP Depreciation on Scrap Assets | 37.70         |
| 15      | <b>Net FRP Depreciation</b>            | <b>135.74</b> |

4.8.4 The summary of the Depreciation as approved in the MYT Order in Case No. 31 of 2016 and as claimed in this Petition is shown in the Table below:

**Table 27: Depreciation for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars  | MYT Order | MSETCL Petition |
|--------------|-----------|-----------------|
| Depreciation | 845.39    | 716.12          |

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

4.8.5 The Commission has noted MSETCL's submissions, and has approved the depreciation in line with the MYT Regulations, 2011. The Commission has considered the closing GFA of FY 2014-15 approved in the Order in Case No. 31 of 2016 and included the disallowed capitalisation for past years as approved in the present Order to compute the opening GFA for FY 2015-16. Further, as discussed in



para 4.7.14 of this Order, the Commission has also deducted from the opening balance of GFA for FY 2015-16, the cumulative capitalisation upto FY 2014-15 (upto Order in Case No. 31 of 2016) allowed for schemes which are disallowed now on account of them being scrapped or no legitimate capitalisation shown against these schemes in future and for which such part capitalisation was allowed previously. Accordingly, the opening GFA has been considered as Rs. 20,561.31 Crore. Further, addition in assets in FY 2015-16 is considered as per the capitalisation approved at para. 4.7 of this Order.

- 4.8.6 The notes to the Audited Annual Accounts mention that the straight line method is adopted and the asset class wise depreciation rates in the MYT Regulations, 2011 are considered for computation of depreciation charged during the year. The Commission has verified that the impact of FRP is excluded while computing the rate of depreciation. Accordingly, the Commission has computed the applicable depreciation rate by considering the depreciation amount as a percentage of the average of actual opening GFA and closing GFA as per the Audited Annual Accounts for FY 2015-16 excluding the depreciation pertaining to FRP, which amounts to 3.28% for FY 2015-16, for the calculation of depreciation.
- 4.8.7 The Commission considered retirement of assets during the year to arrive at the closing balance of assets. Accordingly, depreciation for FY 2015-16 has been computed on the average of opening and closing GFA approved by the Commission and the approved depreciation rate as mentioned earlier.
- 4.8.8 Accordingly, the Commission approves the Depreciation for FY 2015-16 as summarised in the following Table:

**Table 28: Depreciation for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars                                    | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Opening GFA                                    | 20,594.29     | 20,817.65     | 20,468.55              |
| Add: Additional Capitalization during the year | 1,638.72      | 2,128.86      | 2,104.55               |
| Less: Retirement/Adjustments                   | 50.00         | 38.72         | 38.72                  |
| Closing GFA                                    | 22,183.02     | 22,907.79     | 22,534.38              |
| Average Depreciation Rate                      | 3.95%         | 3.28%         | 3.28%                  |
| <b>Total Depreciation</b>                      | <b>845.39</b> | <b>716.12</b> | <b>704.29</b>          |

- 4.8.9 **The Commission approves Depreciation of Rs. 704.29 Crore on Truing-up of ARR for FY 2015-16.**

## 4.9 Interest on Long Term Loans

### *MSETCL's Submission*

- 4.9.1 The Interest on Long Term Loans is computed in accordance with the Regulation 33 of MYT Regulations, 2011. The closing balance of loan of FY 2014-15, calculated after taking into account the impact of capitalization claimed against the disallowed capitalization for FY 2010-11 to 2014-15 is considered as the opening balance of loan for FY 2015-16. A debt-equity ratio of 79.96:20.04 is considered for funding the capitalisation.
- 4.9.2 With regard to retirement of assets, in the books of accounts, assets not in use include 10% residual value of assets for which 90% depreciation has already been charged. Hence, the same has been considered as retirement of assets during the year. Further, where assets have been considered for scrapping, the same will also be considered for retirement. The total retirement of assets for FY 2015-16 has been computed as Rs. 38.72 Crore.
- 4.9.3 MSETCL has considered repayment of normative loan equal to the depreciation. The actual interest rate considered is higher than the rate approved in the Order in Case No. 31 of 2016 for the FY 2015-16. This interest rate is applied to the average of opening balance and closing balance of loan for the year to compute the interest expense on the normative long term loans as approved in the Order in Case No. 31 of 2016.
- 4.9.4 Long term loans are availed from major Financial Institutions (FI), viz., PFC, JICA, REC, IFC, Bank of Baroda, Union Bank of India, Bank of Maharashtra and Oriental Bank of Commerce to fund the capital expenditure.

**Table 29: Interest on Long Term Loans for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | MYT Order | MSETCL Petition |
|-----------------------------|-----------|-----------------|
| Interest on Long Term Loans | 755.49    | 831.48          |

### *Commission's Analysis and Ruling*

- 4.9.5 The Commission has considered the opening balance of loan for FY 2015-16 as the closing balance for FY 2014-15 approved in the Order in Case No. 31 of 2016, after adjusting for the previously disallowed capitalisation for past years as approved in this Order as well as the cumulative capitalisation upto FY 2014-15 disallowed in this Order. The Commission observes that MSETCL has funded different capital expenditure schemes at different debt-equity ratios of 80:20, 75:25 and 70:30 and accordingly computed a weighted average debt-equity ratio of 79.96:20.04. The

Commission has computed the debt-equity ratio for FY 2015-16 at 79.89:20.11 for approved capitalisation of FY 2015-16.

4.9.6 The Commission has considered the repayment of normative loan equal to the depreciation approved for FY 2015-16 in this Order.

4.9.7 The reduction of loans due to retirement of assets is considered as submitted by MSETCL. The Commission has examined the computation for weighted average interest rate for the loan portfolio at the beginning of the FY 2015-16 as well as the documentary evidence substantiating the same, and considered this rate for computing the interest expenses for FY 2015-16.

4.9.8 The Commission in the MYT Order in Case No. 31 of 2016, had ruled the following:

*“5.9.11 In view of the foregoing, the Commission has considered the rate of 10.75% for computing the interest expenses in the provisional Truing-up for FY 2015-16. This rate is applied to the average of opening and closing balance of loans for the year to compute the interest expense on normative Long Term Loans. If the actual weighted average interest rate for FY 2015-16 is higher, the Commission shall consider it at the time of Truing-up for FY 2015-16 to determine interest expenses, but without any carrying cost.”*

4.9.9 In view of the above, the Commission has computed the interest expenses on the approved normative loan for FY 2015-16 by applying the interest rate of 10.75% approved in the MYT Order as well as the weighted average interest rate considered in the present Order at 11.15%. The difference of these two values of interest expenses is excluded while computing the carrying/holding cost. The computation of carrying/holding cost is dealt with in subsequent Sections of this Order.

4.9.10 The interest expenses for FY 2015-16 approved by the Commission are as shown in the Table below.

**Table 30: Interest on Long Term Loans for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Opening Balance of Net Normative Loan  | 6,815.00      | 6,979.72      | 6,714.41               |
| Retirement of Assets   | 50.00         | 38.72         | 38.72                  |
| Debt % considered for reduction in loan due to retirement/adjustment of assets | 80.00%        | 80.00%        | 80.00%                 |
| Less: Reduction of Normative Loan due to retirement or replacement of assets   | 40.00         | 30.98         | 30.98                  |
| Total Capitalization   | 1,638.72      | 2,128.86      | 2,104.55               |
| Debt Component   | 80.00%        | 79.96%        | 79.89%                 |
| Addition of Normative Loan due to capitalisation                               | 1,310.98      | 1,702.13      | 1,681.40               |
| Repayment of Normative loan during the year                                    | 845.39        | 716.12        | 704.29                 |
| Closing Balance of Net Normative Loan  | 7,240.59      | 7,934.76      | 7,660.54               |
| Weighted average Rate of Interest on actual Loans (%)                          | 10.75%        | 11.15%        | 11.15%                 |
| <b>Interest Expenses</b>   | <b>755.49</b> | <b>831.48</b> | <b>801.40</b>          |

**4.9.11 The Commission approves Interest on Long Term Loans as Rs. 801.40 Crore on Truing-up of ARR for FY 2015-16.**

**4.10 Other Interest and Finance Charges**

***MSETCL's Submission***

4.10.1 The finance charges in FY 2015-16 have increased mainly on account of charges towards prepayment of expensive loans. The table below provides the other interest and finance charges for FY 2015-16:

**Table 31: Other Interest and Financing Charges for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars                          | MYT Order | MSETCL Petition |
|--------------------------------------|-----------|-----------------|
| Other Interest and Financing Charges | 5.46      | 6.80            |

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

4.10.2 The Commission has examined the submissions of MSETCL and reasons for higher other interest and financing charges. On query, MSETCL submitted the break-up of the financing charges as well as its reconciliation with the Audited Accounts. It has incurred Stamp Duty of Rs. 0.10 Crore, Service Fee of Rs. 0.01 Crore, bank charges of Rs. 0.07 Crore, pre-payment charges of loan of Rs. 6.43 Crore and Guarantee charges of Rs. 0.18 Crore. Interest on Late Payment of ST amounting to Rs. 2.67 Crore has not been claimed by MSETCL. Accordingly, the Commission approves the same as shown in the Table below.

**Table 32: Other Interest and Financing Charges for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars                | MYT Order | MTR Petition | Approved in this Order |
|----------------------------|-----------|--------------|------------------------|
| Other interest and finance | 5.46      | 6.80         | 6.80                   |

**4.10.3 The Commission approves the actual Interest and Finance Charges of Rs. 6.80 Crore on Truing-up of ARR for FY 2015-16, as claimed by MSETCL.**

#### **4.11 Interest on Working Capital**

##### ***MSETCL's Submission***

4.11.1 As per Regulation 35 of MYT Regulations, 2011, IoWC has been computed based on the norms and the actual audited elements of ARR like O&M expenses, book value of stores, materials and supplies and revenue from Transmission Charges.

4.11.2 The MYT Regulations, 2011 stipulate that the rate of IoWC as the State Bank of India Advance Rate (SBAR) as on the date on which the application for determination of Tariff is made. MSETCL had filed the MYT Petition in Case No. 31 of 2016 for Truing up of FY 2014-15, Provisional Truing up of FY 2015-16 and the ARR for 3<sup>rd</sup> control period FY 2016-17 to FY 2019-20 on 10 February, 2016. The applicable rate of interest on working capital prevalent on this date was 10.8% (SBI Base Rate 9.3% + 1.5%).

4.11.3 MSETCL has utilized its internal accruals for funding its working capital requirements and for the Capex plan. Due to effective management of cash flows, it was able to prudently meet its working capital requirement in FY 2015-16. The actual interest paid on working capital loan is Rs 1.55 Crore. The details of the IoWC claimed by MSETCL are shown in the Table below:

**Table 33: Interest on Working Capital for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | MYT Order | Revised Normative | MSETCL Petition |
|-----------------------------|-----------|-------------------|-----------------|
| Interest on Working Capital | 58.06     | 57.06             | 1.55            |

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

4.11.4 The Commission scrutinized the submissions of MSETCL with regard to the computation of IoWC and estimated normative working capital requirement in accordance with Regulation 35.2 as follows:

- Revised normative O&M expenses based on the actual Bays and Ckt. Km. as approved in this Order for FY 2015-16 are considered for calculating working capital requirements as against the actual values considered by MSETCL.
- The book value of store, materials and supplies is as submitted by MSETCL.
- Revenue from Transmission Charges from the TSUs for April to May, 2015 is considered at Rs. 922.66 Crore (at Rs. 461.33 Crore per month as per the InSTS Tariff Order in Case No. 123 of 2014) and for June, 2015 to March, 2016 at Rs. 2,236.60 Crore (at Rs. 223.66 Crore as per InSTS Tariff Order in Case No. 57 of 2015) i.e. a total revenue of Rs. 3,159.26 Crore.

4.11.5 The rate of interest of 10.80% is considered for computing the normative IoWC in line with the stand taken in the Order in Case No. 31 of 2016 and MSETCL submissions. The relevant extract of the Order is reproduced below:

*“5.11.5 The Commission had sought justification for taking 10.80% for IoWC. MSETCL submitted that its short term loans are at rate of around 9.65% to 9.70%, and hence a rate of 10.80% is considered for IoWC. MSETCL sought that, in case the IoWC is actually higher, the shortfall may be allowed at the time of Truing-up. Considering the lower interest rate for funding working capital requirements, the Commission has considered the IoWC for FY 2015-16 at 10.80%, as submitted by MSETCL. The Commission shall consider the actual IoWC at the time of Truing-up, but no carrying cost would be allowed.”*

4.11.6 The Commission verified the Annual Accounts and observed that there is no security deposit from TSUs.

4.11.7 The IoWC approved by the Commission for FY 2015-16 is as given in the Table below.

**Table 34: Interest on Working Capital for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars   | MYT Order     | MTR Petition  | Approved in this Order |
|---|---------------|---------------|------------------------|
| Operations and Maintenance Expenses for one month   | 116.59        | 109.57        | 132.13                 |
| One-twelfth of the sum of book value of stores, materials and supplies at end of each month       | 26.11         | 23.87         | 23.87                  |
| One and a half months of the expected revenue from transmission charges at the prevailing tariffs | 394.91        | 394.91        | 394.91                 |
| Less: Amount of Security Deposit from Transmission  | -             | -             | -                      |
| <b>Total Working Capital Requirement</b>  | <b>537.61</b> | <b>528.35</b> | <b>550.91</b>          |
| Interest Rate (%)   | 10.80%        | 10.80%        | 10.80%                 |
| <b>Normative Interest on Working Capital</b>  | <b>58.06</b>  | <b>57.06</b>  | <b>59.50</b>           |

**4.11.8 The Commission approves the normative IoWC of Rs. 59.50 Crore on Truing-up of ARR for FY 2015-16. The net entitlement of MSETCL towards the IoWC after sharing of efficiency gains/losses is set out subsequently.**

**4.12 Return on Equity**

***MSETCL's Submission***

4.12.1 MSETCL has worked out the Return on Equity for FY 2015-16 in accordance with the Regulation 32 of the MYT Regulations, 2011. Regulatory equity at the beginning of FY 2015-16 has been considered the same as the closing balance of regulatory equity of FY 2014-15 calculated after taking into account the impact of capitalization claimed against the disallowed capitalization for FY 2010-11 to 2014-15. Further, 20% of the capitalization during the year has been considered for addition in equity. Reduction in equity due to retirement/adjustments of assets in FY 2015-16 has also been considered as 20% of actual retirement of assets/adjustments based on the methodology adopted in the Order in Case No. 207 of 2014. Further, in accordance with the MYT Regulations, 2011, a rate of 15.5% has been considered for computing RoE.

**Table 35: Return on Equity for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars      | MYT Order | MSETCL Petition |
|------------------|-----------|-----------------|
| Return on Equity | 802.77    | 817.53          |

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

4.12.2 As per the principle for RoE computation specified in the MYT Regulations, 2011, the Commission considered the closing balance of regulatory equity for FY 2014-15, after adjusting for the impact of previously disallowed capitalisation for past years as approved in this Order as well as the cumulative capitalisation upto FY 2014-15 disallowed in this Order, as the opening balance of equity for FY 2015-16. Addition in equity due to approved capitalisation in FY 2015-16 is considered at the weighted average debt-equity ratio of 79.89-20.11 computed by the Commission.

4.12.3 The Commission has considered retirement of assets as submitted by MSETCL based on the Audited Annual Accounts for FY 2015-16, and reduced equity to the extent of 20% of the value of retired assets. It has computed RoE at the rate of 15.5% as per the Regulations. RoE as approved by the Commission for FY 2015-16 is set out in the Table below.

**Table 36: Return on Equity for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Regulatory Equity at the beginning of the year                               | 5,020.27      | 5,064.94      | 4,995.12               |
| Capitalisation during the year   | 1,638.72      | 2,128.86      | 2,104.55               |
| Consumer Contribution and Grants used during the year for Capitalisation     | -             | -             | -                      |
| Equity portion of capitalisation during the year                             | 327.74        | 426.72        | 423.15                 |
| Reduction in Equity Capital on account of retirement / replacement of assets | 10.00         | 7.76          | 7.74                   |
| Regulatory Equity at the end of the year                                     | 5,338.01      | 5,483.90      | 5,410.53               |
| <b>RoE %</b>   | <b>15.50%</b> | <b>15.50%</b> | <b>15.50%</b>          |
| Return on Regulatory Equity at the beginning of the year                     | 778.14        | 785.07        | 774.24                 |
| Return on Equity portion of capitalisation during the year                   | 24.63         | 32.47         | 32.19                  |
| <b>Total Return on Regulatory Equity</b>                                     | <b>802.77</b> | <b>817.53</b> | <b>806.44</b>          |

**4.12.4 The Commission approves Return on Equity of Rs. 806.44 Crore on Truing-up of ARR for FY 2015-16.**

#### **4.13 Income Tax**

##### ***MSETCL's Submission***

4.13.1 In accordance with MYT Regulations, 2011, MSETCL has claimed Income Tax as a part of ARR for FY 2015-16. The Current Tax has been paid as per the provisions of the Income Tax Act, 1961 in respect of Taxable Income for the year, after considering permissible tax exemption, reduction/disallowance.

4.13.2 While estimating the Income Tax for FY 2015-16, MSETCL had considered income and expenses for the year and estimated an amount of Rs.26.62 Crore. As against such estimation the actual Income Tax works out to Rs.23.09 Crore.

**Table 37: Income Tax for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars | MYT Order | MSETCL Petition |
|-------------|-----------|-----------------|
| Income Tax  | 26.62     | 23.09           |

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

4.13.3 The Commission has examined the Income Tax Return as well as the Income Tax computation submitted by MSETCL.

4.13.4 The MYT Regulations, 2011 stipulate that Income Tax on account of efficiency gains and incentive shall not be a pass through:



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

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

4.13.5 Income Tax is also payable by MSETCL on the efficiency gains and incentive earned during the year. Hence, to give effect to the Regulations, the efficiency gains and incentive recoverable by MSETCL for FY 2015-16 as approved in this Order have been deducted from the taxable income submitted by MSETCL in its Petition. The Commission has re-computed the Income Tax payable considering the revised taxable income and keeping all the other elements unchanged as per MSETCL’s submission, which amounts to Nil Income Tax liability.

4.13.6 Considering the above, the Commission approves Income Tax expenses as shown in the Table below.

**Table 38: Income Tax for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars | MYT Order | MTR Petition | Approved in this Order |
|-------------|-----------|--------------|------------------------|
| Income Tax  | 26.62     | 23.09        | -                      |

4.13.7 The Commission approves Nil Income Tax on Truing-up of ARR for FY 2015-16.

#### **4.14 Contribution towards Contingency Reserves**

##### ***MSETCL’s Submission***

4.14.1 Contribution towards Contingency Reserves is made in accordance with Regulation 36 of MYT Regulations, 2011 and within the prescribed limits (between 0.25 % and 0.50 % of the original cost of fixed assets annually), and is invested in the approved class of securities authorized under the Indian Trusts Act, 1882. Actual contribution to Contingency Reserves as per the Audited Accounts is as per the following Table.

**Table 39: Contribution to Contingency Reserves for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars                          | MYT Order | MSETCL Petition |
|--------------------------------------|-----------|-----------------|
| Contribution to Contingency Reserves | 51.49     | 52.04           |

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

4.14.2 The MYT Regulations, 2011 provide that:

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

4.14.3 The Commission verified that the actual contribution to Contingency Reserves as per the Audited Annual Accounts are within the range of 0.25% - 0.50% of the approved opening GFA of FY 2015-16, computed by deducting the approved amount of disallowed capitalisation. This adjustment is in line with the stand of the Commission in its MYT Order in Case No. 39 of 2013:

*“4.15.6 The Commission opined that since disallowed capitalisation for previous years has been approved in the present Order, MSETCL wouldn't have set aside its contribution towards contingency reserves for such capitalisation in FY 2011-12. Hence, the Commission computed contribution to contingency reserves at 0.25% of approved opening GFA for FY 2011-12 less approved disallowed capitalisation of past years.”*

4.14.4 The Commission has verified that the accumulated Contingency Reserves of MSETCL do not exceed 5% of the original cost of fixed assets as stipulated in the MYT Regulations, 2011. The addition to the Contingency Reserves during the year FY 2015-16 is verified from the Audited Annual Accounts as well as the documentary evidence submitted vide response to data gaps. Further, vide response to data gaps, MSETCL has clarified that the entitlement for Contingency Reserves for FY 2015-16 in the Petition is 0.25% of the opening GFA which amounts to Rs. 52.07 Crore. Whereas in the Audited Annual Accounts, the Contingency Reserves of Rs. 52.01 Crore includes Rs. 51.49 Crore for FY 2015-16 and Rs. 0.52 Crore as adjustment for Truing up of ARR FY 2014-15 as per Order in Case No. 31 of 2016.

4.14.5 Considering that the contribution to Contingency Reserves for FY 2014-15 on True up has already been allowed in the MYT Order in Case No. 31 of 2016, the Commission has only considered the actual amount of Contingency Reserves pertaining to FY 2015-16 at Rs. 51.49 Crore as per the Audited Annual Accounts for FY 2015-16, in this Order. The contribution to Contingency Reserves approved by the Commission is shown in the Table below.

**Table 40: Contribution towards Contingency Reserves for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars                          | MYT Order | MTR Petition | Approved in this Order |
|--------------------------------------|-----------|--------------|------------------------|
| Contribution to Contingency Reserves | 51.49     | 52.04        | 51.49                  |

#### 4.14.6 The Commission approves Rs. 51.49 Crore as contribution towards Contingency Reserves on Truing-up of ARR for FY 2015-16.

### 4.15 Revenue from Transmission Charges, Income from Wheeling Charges and Point of Connection (PoC) Charges

#### *MSETCL's Submission*

4.15.1 The revenue from Transmission Tariff allowed per month for April, 2015 to March, 2016 was Rs. 3,159.26 Crore (as per InSTS Order in Case No. 123 of 2014 dated 14 August, 2014 for the period April, 2015 to May, 2015 and InSTS Order in Case No. 57 of 2015 dated 26 June, 2015 for the period June, 2015 to March, 2016), and the same has been considered for Truing-up.

4.15.2 MSETCL also earned revenue for wheeling Central Sector power to Goa and Dadra and Nagar Haveli and other Generators, as shown in the Audited Accounts which is considered for Truing up.

4.15.3 MSETCL has also earned revenue from Point of Connection (PoC) charges for Inter-State Transmission System (ISTS) lines of Rs. 59.13 Crore as per receipts for FY 2015-16.

4.15.4 MSETCL has shown the following revenue from Transmission Tariff and other sources:

**Table 41: Revenue from Transmission Charges and other sources for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars   | MYT Order | MSETCL Petition |
|---|-----------|-----------------|
| Revenue from Transmission Tariff  | -         | 3,159.26        |
| Revenue from Wheeling Charges from Goa and Dadra & Nagar Haveli and other sources | 61.91     | 47.82           |
| PoC Charges for Inter-State Lines (ISTS)  | 59.10     | 59.13           |

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

4.15.5 The Commission has considered the approved revenue as per the InSTS Tariff Orders, which is also set out by MSETCL in its Petition, as the revenue recovered from Transmission charges; and income from Dadra & Nagar Haveli Wheeling Charges and PoC Charges for wheeling Inter-State power to Goa, as verified from the Audited Annual Accounts. Accordingly, the revenue from Transmission Charges and other sources as approved by the Commission is given in the Table below:

**Table 42: Revenue from Transmission Charges and other sources for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars   | MYT Order | MTR Petition | Approved in this Order |
|---|-----------|--------------|------------------------|
| Revenue from Transmission Charges   | -         | 3,159.26     | 3,159.26               |
| Income from Wheeling Charges from Goa, Dadra and Nagar Haveli and other sources | 61.91     | 47.82        | 47.82                  |
| Income from PoC charges for Inter-State lines                                   | 59.10     | 59.13        | 59.13                  |

**4.15.6 The Commission approves revenue from Transmission Tariff as Rs. 3,159.26 Crore, income from Goa, Dadra & Nagar Haveli and other sources towards Wheeling Charges as Rs. 47.82 Crore, and PoC Charges for Inter-State Transmission Lines as Rs. 59.13 Crore on Truing-up of ARR for FY 2015-16.**

#### **4.16 Non-Tariff Income**

##### ***MSETCL's Submission***

4.16.1 Non-Tariff Income has increased in FY 2015-16 over FY 2014-15 primarily on account of increase in revenue from short term Open Access Charges and income from supervisory services. It includes the interest earned on Contingency Reserves and other investment, revenue from Open Access charges, excess provision written back, other miscellaneous income, etc. Apart from these, MSETCL has also considered profit and revenue from sale of scrap, as in the MYT / previous MTR Order. Accordingly, only the revenue from sale of scrap of items which are of revenue expenditure in nature has been considered as Non-Tariff Income.

4.16.2 On the analogy of the subsequent MYT Regulations, 2015, MSETCL has not included the DPC recoverable from the TSUs in the Non-Tariff Income for FY 2015-16. Further, MSETCL has stated that it has neither realised nor included this DPC in its books of accounts.

**Table 43: Non-Tariff Income for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars       | MYT Order | MSETCL Petition |
|-------------------|-----------|-----------------|
| Non-Tariff Income | 1,016.80  | 210.04          |

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

4.16.3 The DPC payable by MSEDCL was not waived by the Commission vide the Order in Case No. 151 of 2014 and the same was payable by the Transmission System User i.e. MSEDCL and recoverable by Transmission Licensees. The Commission has set out the reasons for inclusion of the Delayed Payment Charges (DPC) as a part of Non-

Tariff Income for FY 2015-16 in its previous Orders in Case No. 207 of 2014 (MTR Order) as well as Case No. 31 of 2016 (MYT Order).

4.16.4 Moreover, the APTEL in the judgments vide Appeal Nos. 244 of 2015 in the matter of Tata Power Co. – Generation, Appeal No. 246 of 2015 of Tata Power Co. – Transmission, Appeal Nos. 250 of 2015 and 242 of 2016 of Jaigad Power Transco Ltd. and Review Appeal Nos 7 and 8 of 2017 in the matter of Jaigad Power Transco Ltd. has upheld the stand of the Commission in this matter. Moreover, the issue is also under the consideration of the Supreme Court however, no stay on the Commission's Order has been granted. Accordingly, the Commission retains its stand of including DPC as a part of Non-Tariff Income for FY 2015-16.

4.16.5 Further, since the Truing up of FY 2015-16 is governed by the provisions of MYT Regulations, 2011, the provisions of MYT Regulations, 2015 cannot be applied to FY 2015-16, as has been claimed by MSETCL.

4.16.6 The Commission verified the details of the Non-Tariff Income submitted by MSETCL from the Audited Annual Accounts and also considered the DPC for FY 2015-16 approved in the Order in Case No. 31 of 2016 at Rs. 855 Crore, and accordingly approves the Non-Tariff Income including the DPC for FY 2015-16 as per the following Table.

**Table 44: Non-Tariff Income for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars       | MYT Order | MTR Petition | Approved in this Order |
|-------------------|-----------|--------------|------------------------|
| Non-Tariff Income | 1,016.80  | 210.04       | 1,065.04               |

4.16.7 The Commission approves Rs. 1,065.04 Crore as Non-Tariff Income on Truing-up of ARR for FY 2015-16.

#### **4.17 Incentive on Transmission System Availability**

##### ***MSETCL's Submission***

4.17.1 MSETCL has sought incentive on Transmission System Availability as per the following Table.

**Table 45: Incentive on Transmission System Availability for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars  | Incentive    |
|--------------|--------------|
| HVAC         | 51.44        |
| HVDC         | 14.35        |
| <b>Total</b> | <b>65.79</b> |

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

4.17.2 The Commission verified the actual Availability from the MSLDC certification. Accordingly, the Commission has allowed incentive on Transmission System Availability as follows.

**Table 46: Incentive on Transmission System Availability for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars  | Actual Availability (%) | Target Availability (%) | ARR of FY 2015-16 | % Allocation of ARR | ARR Allocation | Incentive    |
|--------------|-------------------------|-------------------------|-------------------|---------------------|----------------|--------------|
| HVAC         | 99.72%                  | 98.00%                  | 2,472.18          | 85.04%              | 2,102.34       | 40.59        |
| HVDC         | 94.56%                  | 92.00%                  |                   | 14.96%              | 369.84         | 11.32        |
| <b>Total</b> |                         |                         |                   |                     |                | <b>51.91</b> |

4.17.3 The Commission approves the incentive of Rs. 51.91 Crore for higher Transmission System Availability on Truing-up of ARR for FY 2015-16.

### **4.18 Sharing of gains/losses**

#### ***MSETCL's Submission***

#### **O&M Expenses**

4.18.1 The summary of the sharing of efficiency gain/(loss) for O&M expenses based on the controllable and uncontrollable parameters is as shown in the following Table.

**Table 47: Sharing of efficiency gain/(loss) for O&M Expenses for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars  | Normative for FY 2015-16 | Audited/ Actual for FY 2015-16 | Entitlement as per Regulation /Order | Efficiency Gain/(Loss) | Efficiency Gain/(Loss) shared with TSUs | Net Entitlement of MSETCL |
|--------------|--------------------------|--------------------------------|--------------------------------------|------------------------|---|---------------------------|
| O&M Expenses | 1,845.71                 | 1,314.87                       | 1,845.71                             | 530.84                 | 176.95                                  | 1,668.76                  |

### **Interest on Working Capital**

4.18.2 In accordance with the MYT Regulations, 2011, efficiency gain on IoWC needs to be computed if the actual IoWC is less than the normative. The difference between the IoWC computed based on norms and the actual IoWC has been considered as the efficiency gain. The computation of efficiency gain is given below:

**Table 48: Sharing of efficiency gain/(loss) for Interest on Working Capital for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | Normative for FY 2015-16 | Audited/ Actual for FY 2015-16 | Entitlement as per Regulation /Order | Efficiency Gain/(Loss) | Efficiency Gain/(Loss) shared with TSUs | Net Entitlement of MSETCL |
|-----------------------------|--------------------------|--------------------------------|--------------------------------------|------------------------|---|---------------------------|
| Interest on Working Capital | 57.06                    | 1.55                           | 57.06                                | 55.51                  | 18.50                                   | 38.56                     |

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

4.18.3 The Commission has re-computed the normative O&M expenses based on the actual number of Bays and Ckt. Km. for FY 2015-16. The O&M expenses have been considered as controllable expenses. The efficiency gain/loss on the difference between the revised normative and the actual approved O&M expenses is computed as per the MYT Regulations, 2011. 1/3<sup>rd</sup> of the efficiency gain is shared with the TSUs, and the remaining is added to the net entitlement of O&M expenses of MSETCL, in line with the Regulations.

4.18.4 In the case of IoWC, the efficiency gain / loss is computed as the difference between the actual IoWC incurred in FY 2015-16 and the normative IoWC approved by the Commission after considering other elements of expenditure and revenue as approved after Truing-up.

4.18.5 1/3<sup>rd</sup> of the efficiency gain on this account is shared with the TSUs, and the remaining is added to the net entitlement of IoWC of MSETCL, in line with the Regulations.

4.18.6 The summary of sharing of efficiency gains/(losses) as approved by the Commission is shown in the Table below.

**Table 49: Sharing of efficiency gain/(loss) due to variation in O&M Expenses and Interest on Working Capital for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars                      | Normative for FY 2015-16 | Audited/ Actual for FY 2015-16 | Entitlement as per Regulation/ Order | Efficiency Gain/(Loss) | Efficiency Gain/(Loss) shared with TSUs | Net Entitlement of MSETCL |
|----------------------------------|--------------------------|--------------------------------|--------------------------------------|------------------------|---|---------------------------|
| Operation & Maintenance Expenses | 1,585.51                 | 1,272.20                       | 1,585.51                             | 313.31                 | 104.44                                  | 1,481.08                  |
| Interest on Working Capital      | 59.50                    | 1.55                           | 59.50                                | 57.95                  | 19.32                                   | 40.18                     |

4.18.7 The Commission approves the net entitlement against O&M Expenses at Rs. 1,481.08 Crore, and against Interest on Working Capital at Rs. 40.18 Crore, after sharing of efficiency gains, on Truing-up of ARR for FY 2015-16.



#### 4.19 Summary of Truing-up of ARR for FY 2015-16

##### *MSETCL's Submission*

4.19.1 The summary of the True up of ARR for FY 2015-16, as submitted by MSETCL is shown in the following Table:

**Table 50: Summary of Truing-up of ARR for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars  | Order in Case No. 31 of 2016 | Normative | FY 2015-16 Audited (Actual) | Net Entitlement after sharing of gain/(Loss) |
|--|------------------------------|-----------|-----------------------------|--|
| Operation & Maintenance Expenses   | 1,399.10                     | 1,845.71  | 1,314.87                    | 1,668.76                                     |
| Depreciation Expenses  | 845.39                       | -         | 716.12                      | 716.12                                       |
| Interest on Loan Capital   | 755.49                       | -         | 831.48                      | 831.48                                       |
| Other Interest and Finance Charges   | 5.46                         | -         | 6.80                        | 6.80   |
| Interest on Working Capital  | 58.06                        | 57.06     | 1.55                        | 38.56  |
| Income Tax   | 26.62                        | -         | 23.09                       | 23.09  |
| Contribution to contingency reserves   | 51.49                        | -         | 52.04                       | 52.04  |
| <b>Total Revenue Expenditure</b>   | <b>3,141.61</b>              | -         | <b>2,945.96</b>             | <b>3,336.86</b>                              |
| Add: Return on Equity Capital  | 802.77                       | -         | 817.53                      | 817.53                                       |
| <b>Aggregate Revenue Requirement</b>   | <b>3,944.38</b>              | -         | <b>3,763.49</b>             | <b>4,154.39</b>                              |
| Less: Non-Tariff Income  | 1,016.80                     | -         | 210.04                      | 210.04                                       |
| Less: Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 61.91                        | -         | 47.82                       | 47.82  |
| Less: Income from PoC charges for Inter-State lines                                      | 59.10                        | -         | 59.13                       | 59.13  |
| <b>Aggregate Revenue Requirement from Transmission</b>                                   | <b>2,806.57</b>              | -         | <b>3,446.50</b>             | <b>3,837.40</b>                              |
| Add: Incentive on higher Transmission System Availability of HVAC System                 | -                            | -         | 51.44                       | 51.44  |
| Add: Incentive on higher Transmission System Availability of HVDC System                 | -                            | -         | 14.35                       | 14.35  |
| <b>Revenue from Transmission Tariff</b>  | -                            | -         | <b>3,159.26</b>             | <b>3,159.26</b>                              |
| Revenue Gap/(Surplus) for current year   | -                            | -         | -                           | <b>743.93</b>                                |



| Particulars   | Order in Case No. 31 of 2016 | Normative | FY 2015-16 Audited (Actual) | Net Entitlement after sharing of gain/(Loss) |
|---|------------------------------|-----------|-----------------------------|--|
| Revenue Gap/(Surplus) till previous year              | -                            | -         | -                           | (1,337.78)                                   |
| <b>Cumulative Revenue Gap/(Surplus) till the year</b> | -                            | -         | -                           | <b>(593.85)</b>                              |

### *Commission's Analysis and Ruling*

4.19.2 The summary of the net ARR and efficiency gains, as approved by the Commission for FY 2015-16, is shown in the following Table:

**Table 51: Summary of Truing-up of ARR for FY 2015-16 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order       | Normative | Actual          | Net Entitlement after sharing of gain/(Loss) |
|--|-----------------|-----------|-----------------|--|
| Operation & Maintenance Expenses   | 1,399.10        | 1,585.51  | 1,272.20        | 1,481.08                                     |
| Depreciation Expenses  | 845.39          | -         | 704.29          | 704.29                                       |
| Interest on Loan Capital   | 755.49          | -         | 801.40          | 801.40                                       |
| Other Interest and Finance Charges   | 5.46            | -         | 6.80            | 6.80   |
| Interest on Working Capital  | 58.06           | 59.50     | 1.55            | 40.18  |
| Income Tax   | 26.62           | -         | -               | -  |
| Contribution to contingency reserves   | 51.49           | -         | 51.49           | 51.49  |
| <b>Total Revenue Expenditure</b>   | <b>3,141.61</b> | -         | <b>2,837.73</b> | <b>3,085.24</b>                              |
| Add: Return on Equity Capital  | 802.77          | -         | 806.44          | 806.44                                       |
| <b>Aggregate Revenue Requirement</b>   | <b>3,944.38</b> | -         | <b>3,644.17</b> | <b>3,891.68</b>                              |
| Less: Non Tariff Income  | 1,016.80        | -         | 1,065.04        | 1,065.04                                     |
| Less: Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 61.91           | -         | 47.82           | 47.82  |
| Less: Income from PoC charges for Inter-State lines                                      | 59.10           | -         | 59.13           | 59.13  |
| <b>Aggregate Revenue Requirement from Transmission</b>                                   | <b>2,806.57</b> | -         | <b>2,472.18</b> | <b>2,719.68</b>                              |
| Add: Incentive on higher Transmission System Availability                                | -               | -         | 51.91           | 51.91  |
| Revenue from Transmission Tariff   | -               | -         | 3,159.26        | 3,159.26                                     |
| <b>Revenue Gap/(Surplus) for current year</b>  | -               | -         | -               | <b>(387.66)</b>                              |
| Revenue Gap/(Surplus) till previous year   | -               | -         | -               | (985.09)                                     |
| <b>Cumulative Revenue Gap/(Surplus) till the year</b>                                    | -               | -         | -               | <b>(1,372.75)</b>                            |

4.19.3 The detailed analysis underlying the Commission's approval of individual ARR elements on Truing up of ARR for FY 2015-16 is already set out above, however, the variation in the ARR sought by the MSETCL and that approved by the Commission in this Order is mainly on account of disallowance of prior period O&M expenses and lower approval of capitalisation which impacts the depreciation, Interest on Long Term Loans, RoE, IoWC and Availability Incentive approved by the Commission. Further, the Commission has computed the Income Tax liability of MSETCL excluding the efficiency gains and Availability Incentive which is nil in the case of

FY 2015-16. Moreover, the Commission has maintained the stand of including the DPC as a part of Non-Tariff Income in FY 2015-16, as per the MYT Order in Case No. 31 of 2016.

- 4.19.4 The Revenue Surplus till the previous year considered by MSETCL in the summary Table submitted, as approved in the Order in Case No. 31 of 2016 is Rs. 1,337.79 Crore which includes the Revenue Surplus of Rs. 352.71 Crore on provisional Truing up of FY 2015-16. Since, the final Revenue Gap/Surplus is computed on Truing up for FY 2015-16 in this Order, separately, retaining this provisional Revenue Surplus in the computation of cumulative Gap/Surplus would amount to double counting of the same and hence it is excluded from the computation of cumulative Gap/Surplus.
- 4.19.5 **The Commission approves a cumulative Revenue Surplus of Rs. 1,372.75 Crore on Truing-up of ARR for FY 2015-16, considering the efficiency gain and incentive for the year, to be recovered in the ARR for FY 2018-19. The holding cost on the Revenue Surplus for FY 2015-16 after Truing-up is dealt with in subsequent Sections of this Order.**

## 5 TRUING-UP OF ARR FOR FY 2016-17

### 5.1 Background

5.1.1 MSETCL has sought Truing-up of ARR for FY 2016-17 considering actual expenditure and revenue as per the Audited Accounts and in accordance with the MYT Regulations, 2015. It has submitted reasons for variations in the actual expenses for FY 2016-17 as compared to those approved in the MYT Order in Case No. 31 of 2016.

5.1.2 MSETCL has adopted the INd-AS accounting standards FY 2016-17 onwards. However, Truing up of the ARR is sought considering the values as per the existing IGAAP accounting standards.

5.1.3 The analysis underlying the Commission's approval is set out below.

### 5.2 Operation & Maintenance Expenses

5.2.1 MSETCL has computed the O&M expenses in accordance with Regulation 58 of the MYT Regulations, 2015 which comprises Employee expenses, Administration and General (A&G) expenses and Repairs and Maintenance (R&M) expenses. The summary of O&M expenses is as given below:

**Table 52: O&M Expenses for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| O&M Expenses  | MYT Order | Normative | MSETCL Petition |
|---|-----------|-----------|-----------------|
| Employee Expenses   | 1,469.05  | 2,030.45  | 977.11          |
| A&G Expenses  |           |           | 254.21          |
| R&M Expenses  |           |           | 142.89          |
| <b>Total Operation &amp; Maintenance Expenses (Net of capitalisation)</b> |           |           | <b>1,374.21</b> |

5.2.2 The actual O&M expenses incurred are less than the normative. The reasons for major deviations in actual O&M expenses incurred in FY 2016-17 as compared to FY 2015-16 have been submitted.

5.2.3 MSETCL's submissions on each of these expenditure heads, and the Commission's analysis are detailed below.

### 5.3 Employee Expenses

#### *MSETCL's Submission*

5.3.1 The Employee expenses for FY 2016-17 are arrived at after taking into consideration the actual expenses as per the Audited Accounts, expense capitalized and SLDC Employee Expense.

- 5.3.2 The Earned Leave Encashment which is dependent on actual claim of employees has increased by Rs. 22.67 Crore in FY 2016-17 as compared to FY 2015-16.
- 5.3.3 Dearness Allowance (DA) has increased in FY 2016-17 over FY 2015-16 by Rs. 11.70 Crore on account of regular upward revision in the rate of DA which in turn has resulted in increase in salaries of staff. DA is a component of salary and is computed on the basic salary of employees. The weighted average DA rate for FY 2016-17 was 131.25% as against the weighted average DA rate of 119% applicable during FY 2015-16 and 105.92% during FY 2014-15. MSETCL has submitted the applicable DA rates for FY 2010-11 to FY 2016-17 in its Petition.
- 5.3.4 Staff Welfare Expenses have increased owing to consideration of Medi-claim policy amounting to Rs. 12.20 Crore being included in the Staff Welfare Expenses instead of Other Allowance. The break-up of Staff Welfare Expenses is as shown in the following table:

**Table 53: Break up of Staff Welfare Expenses for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particular   | Amount       |
|--|--------------|
| Medical Expenses   | 19.85        |
| Canteen Expenses   | 0.28         |
| Education Expenses   | 0.01         |
| Uniform and Liveries Expenses  | 0.70         |
| Recreation Expenses  | 0.05         |
| Other Welfare Expenses   | 1.06         |
| Insurance Premium Payable under LIC Group Team Assurance             | 0.93         |
| Board's Contribution towards MSEB Employee Development Welfare Trust | 0.49         |
| <b>Total</b>   | <b>23.37</b> |

- 5.3.5 Other allowances have increased by Rs. 40.23 Crore in FY 2016-17 as compared to FY 2015-16 on account of the following reasons:
- Medical Allowances – Medical Allowance has reduced by Rs. 12.20 Crore as the impact of Mediclaim policy has been included under Staff Welfare Expenses.
  - Contributory Provident Fund – MSETCL contributes to Contributory Provident Fund in case of shortfall in Fair Value of planned assets and an amount of Rs.19.43 Crore has been provided for the same.

- iii. Leave Encashment – Based on the actuarial valuation, MSETCL has considered an increase in provision of leave encashment to the tune of Rs. 27.57 Crore.

5.3.6 The employee expenses for FY 2016-17 as submitted by MSETCL are shown in the Table below:

**Table 54: Employee Expenses for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| <b>Employee Expenses</b>  | <b>MSETCL<br/>Petition</b> |
|---|----------------------------|
| Gross Employee Expenses   | 1,067.49                   |
| Less: Expenses Capitalised  | 76.83                      |
| <b>Net Employee Expenses</b>  | <b>990.66</b>              |
| Less: SLDC Employee Expense   | 13.55                      |
| <b>Net Employee Expense after adjustment for SLDC Employee Expense</b>  | <b>977.11</b>              |
| Add: Prior Period Employee Expense                                      | -                          |
| <b>Net Employee Expense after adjustment for SLDC and other Expense</b> | <b>977.11</b>              |

### *Commission's Analysis and Ruling*

5.3.7 The Commission has examined the component-wise comparison of actual Employee expenses for FY 2016-17 vis-a-vis FY 2015-16 submitted by MSETCL, as shown in the following Table:

**Table 55: Deviation analysis of Employee Expenses for FY 2016-17 (Rs. Crore)**

| <b>Particulars</b>                       | <b>FY<br/>2015-16</b> | <b>FY<br/>2016-17</b> | <b>Difference</b> |
|--|-----------------------|-----------------------|-------------------|
|  | <b>Actual</b>         | <b>Actual</b>         |                   |
| Basic Salary                             | 284.14                | 273.72                | (10.42)           |
| Dearness Allowance (DA)                  | 333.66                | 345.36                | 11.70             |
| House Rent Allowance                     | 32.55                 | 31.58                 | (0.98)            |
| Earned Leave Encashment                  | 7.87                  | 30.54                 | 22.67             |
| Other Allowances                         | 118.07                | 158.31                | 40.23             |
| Medical Reimbursement                    | 1.60                  | 0.58                  | (1.02)            |
| Overtime Payment                         | 30.70                 | 33.08                 | 2.38              |
| Bonus/Ex-Gratia Payments                 | 12.12                 | 13.63                 | 1.51              |
| Staff welfare expenses                   | 4.80                  | 23.37                 | 18.57             |
| Payment under Workmen's Compensation Act | 0.18                  | -                     | (0.18)            |
| Provident Fund Contribution              | 82.41                 | 73.89                 | (8.52)            |

| Particulars                    | FY<br>2015-16 | FY<br>2016-17   | Difference   |
|--------------------------------|---------------|-----------------|--------------|
|                                | Actual        | Actual          |              |
| Pension Payments               | 0.08          | 0.06            | (0.01)       |
| Gratuity Payment               | 84.26         | 83.37           | (0.89)       |
| Leave Encashment on Retirement | 3.64          | -               | (3.64)       |
| <b>Gross Employee Expenses</b> | <b>996.09</b> | <b>1,067.49</b> | <b>71.40</b> |

- 5.3.8 The Commission has examined the reasons for increase in DA, Earned Leave Encashment, Other Allowances, Staff Welfare Expenses etc. as well as the documentary evidence such as DA rate circulars, Audited Annual Accounts, Actuarial Valuation Report etc.
- 5.3.9 The Commission vide data gaps sought the break-up of Staff Welfare Expenses and Other Allowances. Vide response to data gaps, MSETCL submitted the break-up of these expense heads, which have been scrutinized. On further query, regarding Employee Development Welfare Trust sub-head under Staff Welfare Expenses, MSETCL clarified that as per Circular No. 22639 dated 19/05/1973, the money in the Employee Development Welfare Trust may be utilized to pay for the expenditure on (i) construction of staff clubs, recreation, halls and Labour Welfare centers, (ii) equipment such as furniture, lockers, radios, record-players, water coolers and indoor and outdoor games, sports materials, library books grant of scholarships and prizes to school children (iii) provision of health and welfare services, maternity centers, furniture and equipment of canteens for employees (iv) medicines, (v) community and social education of employees such as literacy classes, etc. and also to give relief to the employees in distress. MSETCL further clarified that no interest income is earned from this Trust. On further query regarding the Electricity charge allowance sub-head under the Other Allowances head, MSETCL clarified that it is paid to the rank of additional Executive Engineer as per Administrative Circular no. 408 dated 05/07/2014. Furthermore, electricity supervisory allowance is paid to the officers equivalent to the rank of Executive Engineer and above as per administrative Circular no. 409 dated 05/07/2014.
- 5.3.10 The Commission accepts the DA as an uncontrollable factor since it is declared from time to time by the Government, and the Commission approves the DA as per MSETCL's submission.
- 5.3.11 Similarly, the Earned Leave Encashment is dependent on the actual claims by employees and hence the Commission approves it as per MSETCL's submission.
- 5.3.12 MSETCL has submitted that Staff Welfare Expenses have increased on account of the Mediclaim policy premium being included in the Staff Welfare Expenses instead of Other Allowance. The Commission accepts the same and approves the Staff Welfare Expenses as per MSETCL's submission.

5.3.13 The contribution to Contributory Provident Fund in case of shortfall in Fair Value of planned assets is an uncontrollable expense and the provision for Leave Encashment is based on actuarial valuation which is again uncontrollable and the Commission approves the same as submitted by MSETCL.

5.3.14 The Commission has considered capitalised Employee expenses as per Audited Annual Accounts, and the MSLDC related Employee expenses as sought by MSETCL.

5.3.15 The employee expenses approved by the Commission for FY 2016-17 are as shown in the Table below:

**Table 56: Employee Expenses for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars  | MTR<br>Petition | Approved in<br>this Order |
|--|-----------------|---------------------------|
| Gross Employee Expenses  | 1,067.49        | 1,067.49                  |
| Less: Expenses Capitalised   | 76.83           | 76.83                     |
| <b>Net Employee Expenses</b>   | <b>990.66</b>   | <b>990.66</b>             |
| Less: SLDC Employee Expense  | 13.55           | 13.55                     |
| <b>Net Employee Expense after adjustment<br/>for SLDC Employee Expense</b> | <b>977.11</b>   | <b>977.11</b>             |
| Add: Prior Period Employee Expense   | -               | -                         |
| <b>Total Employee Expense</b>  | <b>977.11</b>   | <b>977.11</b>             |

5.3.16 The Commission approves net Employee Expenses of Rs. 977.11 Crore on Truing-up of ARR for FY 2016-17.

#### 5.4 Administrative and General Expenses

##### *MSETCL's Submission*

5.4.1 MSETCL's assets base has been increasing since the past few years which directly impact various heads of A&G Expenses like electricity charges, vehicle running and hiring expenses, security expenses and other A&G expenses. The major reason for increase in A&G Expenses in FY 2016-17 as compared to FY 2015-16, is on account of higher outsourced personnel salary, charges for security arrangements and sundry debtors written off.

5.4.2 The increase in A&G expenses is mainly on account of following reasons:

- ***Increase in Charges for Security arrangements:*** The security charges have increased by Rs. 9.48 Crore owing to increase in number of Sub-stations, increase in Dearness Allowance of the security personnel and increase in security arrangements like CCTV cameras, fencing, etc.

- ***Increase in salary of outsourced personnel:*** The salary of outsourced personnel has increased by Rs. 4.56 Crore in FY 2016-17 over FY 2015-16 due to increase in Dearness Allowance of these personnel.
- ***Decrease in Professional, Consultancy and Technical Fees:*** Professional, Consultancy and Technical Fees have increased in FY 2015-16 over FY 2014-15 on account of two studies carried out by MSETCL for improvement initiatives, as elaborated in earlier Sections. However, in FY 2016-17 these expenses have returned to normal levels and hence the decrease as compared to FY 2015-16.
- ***Decrease in IT related expenses / computer stationery:*** The decrease in IT related expenses / Computer Stationery is predominantly owing to the following reasons:
  - AMC for 11 Modules of SAP-ERP was carried out by IBM in FY 2015-16 whereas AMC for only 5 Modules of SAP-ERP was covered in FY 2016-17.
  - Recurring expenditure on Data Centre Co-location, Hosting and Managed IT services reduced after migrating from M/s IBM to M/s ESDS datacentre.
  - Separate Internet Bandwidth and P2P links expenditure was incurred in FY 2015-16, whereas the same was covered in the work order of M/s ESDS in FY 2016-17.
  - After completion of IBM support contract of 4 years and handing over of ERP support documents to MSETCL, the balance 10% AMC amount was paid in FY 2015-16.
  - One time payment towards SSL certificate was made in FY 2015-16.
  - AMC and DBA Services for Central Purchase Agency (CPA) e-tendering was discontinued in FY 2016-17.

5.4.3 The A&G expenses for FY 2016-17 as per the Audited Accounts as submitted by MSETCL are shown in the Table below:

**Table 57: A&G Expenses for FY 2016-17 as submitted by MSETCL (Rs. Crore)**

| <b>Administrative and General Expense</b>                                | <b>MSETCL<br/>Petition</b> |
|--|----------------------------|
| Gross A&G Expenses   | 273.40                     |
| Less: Expenses Capitalised   | 13.97                      |
| <b>Net A&amp;G Expenses</b>  | <b>259.43</b>              |
| Less: SLDC A & G Expense   | 5.22                       |
| <b>Net A &amp; G Expense after adjustment for SLDC A &amp; G Expense</b> | <b>254.21</b>              |



| <b>Administrative and General Expense</b>  | <b>MSETCL<br/>Petition</b> |
|--|----------------------------|
| Less: RLDC Fees & WRPC charges   | -                          |
| <b>Net A&amp;G Expense after adjustment for RLDC Fees &amp; WRPC charges</b>     | <b>254.21</b>              |
| Prior Period Expense: Administration & Other Expenses                            | -                          |
| <b>Net A&amp;G expense after considering administration &amp; other expenses</b> | <b>254.21</b>              |

### *Commission's Analysis and Ruling*

5.4.4 The Commission has examined the component-wise comparison of actual A&G expenses for FY 2016-17 vis-a-vis FY 2015-16 submitted by MSETCL, as shown in the following Table:

**Table 58: Deviation analysis of A&G Expenses for FY 2016-17 (Rs. Crore)**

| <b>Particulars</b>                                  | <b>FY<br/>2015-16</b> | <b>FY<br/>2016-17</b> | <b>Difference</b> |
|---|-----------------------|-----------------------|-------------------|
|   | <b>Actual</b>         | <b>Actual</b>         |                   |
| Rent Rates & Taxes                                  | 21.31                 | 23.48                 | 2.17              |
| Insurance   | 3.07                  | 3.41                  | 0.34              |
| Telephone & Postage, etc.                           | 4.83                  | 4.88                  | 0.04              |
| Legal charges & Audit fee                           | 1.16                  | 1.54                  | 0.38              |
| Professional, Consultancy, Technical fee            | 8.96                  | 3.98                  | (4.98)            |
| Conveyance & Travel                                 | 9.19                  | 9.59                  | 0.40              |
| Electricity charges                                 | 52.92                 | 51.71                 | (1.21)            |
| Water charges                                       | 4.53                  | 5.43                  | 0.90              |
| Security arrangements                               | 47.92                 | 57.40                 | 9.48              |
| Fees & subscription                                 | 7.59                  | 7.25                  | (0.34)            |
| Books & periodicals                                 | 0.05                  | 0.11                  | 0.05              |
| Computer Stationery / IT and communication expenses | 12.82                 | 3.46                  | (9.36)            |
| Printing & Stationery                               | 2.92                  | 2.75                  | (0.17)            |
| Advertisements                                      | 0.33                  | 0.55                  | 0.21              |
| Purchase Related Advertisement Expenses             | 8.50                  | 10.07                 | 1.57              |
| License Fee and other related fee                   | 0.10                  | 0.09                  | (0.01)            |
| Vehicle Running Expenses Truck / Delivery Van       | 4.99                  | 5.10                  | 0.11              |
| Vehicle Hiring Expenses Truck / Delivery Van        | 16.09                 | 18.50                 | 2.41              |
| Freight On Capital Equipment                        | 0.05                  | 0.04                  | (0.01)            |
| Miscellaneous Expenses                              | 0.46                  | 2.93                  | 2.47              |
| Office Expenses                                     | 9.23                  | 11.34                 | 2.11              |
| Other Expenses                                      | 17.13                 | 49.82                 | 32.69             |
| <b>Total</b>  | <b>234.16</b>         | <b>273.41</b>         | <b>39.24</b>      |

- 5.4.5 The Commission notes that there is significant increase in security expenses and outsourced personnel salary whereas a decrease in consultancy fees and IT related expenses, the reasons for which have been provided by MSETCL vide response to data gaps and also re-iterated in its revised Petition. The Commission has analysed the reasons provided for deciding if the cost deviations have resulted from uncontrollable factors.
- 5.4.6 MSETCL has claimed that the increase in the security charges have increased owing to increase in number of substations, increase in Dearness Allowance of the security personnel and increase in security arrangements like CCTV cameras, fencing, etc. The Commission accepts that this increased expenditure was inevitable and hence, has approved it as submitted by MSETCL.
- 5.4.7 In response to a query, MSETCL submitted the break-up of Other Expenses under broad heads viz. Sundry debit Balance written off, outsourced Personnel salary, expenditure on meetings/conferences, commission on sale of scrap among others. Further, MSETCL also submitted that the salary of outsourced personnel has increased due to increase in Dearness Allowance of these personnel. The Commission observes that increase in Other Expenses as compared to the previous year are on account of aforementioned elements and accepts the reasons submitted and approves this expense as submitted by MSETCL.
- 5.4.8 The IT related expenses / computer stationery expenses as well as the technical and consultancy fees were lower in FY 2016-17 as compared to FY 2015-16 and the Commission has approved these as submitted by MSETCL.
- 5.4.9 The Commission observed that MSETCL has included expenses towards Corporate Social Responsibility (CSR) amounting to Rs. 0.80 Crore in the A&G expenses for FY 2016-17. The Commission has disallowed the CSR expenses claimed in FY 2016-17, in line with the stand taken in the MYT Order of Maharashtra Eastern Grid Power Transmission Co. Ltd. (MEGPTCL) in Case No. 66 of 2014. The relevant extract of the said Order is reproduced below:

*3.12.2 As regards contribution towards Corporate Social Responsibility (CSR), the Commission is of the view that if the company or the shareholders of the company wish to contribute/donate towards charitable causes, the same should be contributed from return earned out of the business, rather than passing on such costs to the consumers. The Commission also points out that the Companies Act, 2013 also contains sections exclusively dealing with the aspects related to Corporate Social Responsibility. It has been prescribed that certain part (at least 2%) of the average net profit of the last three preceding years has to be spent on CSR activities every year. Accordingly, the Companies Act also envisages that the expenditure towards CSR has to be funded through the returns earned by the company.*

*3.12.3 The Commission's view in the matter has been upheld by the Hon'ble Appellate Tribunal for Electricity in its Order in the matter of Appeal No. 104, 105 and 106 of 2012 dated 28 November, 2013. The relevant part of the Order is reproduced below for reference:*

*"120 Summary of the findings. .... b) At the outset, it shall be mentioned that the Community Social Responsibility is the responsibility of the Company. The contention of the Appellant that the State Commission had approved these expenses in the ARR petition and that therefore, it cannot change during true up exercise is not tenable. In fact, the State Commission is duty bound to apply prudence check while truing up otherwise no purpose would be served in truing up. On going through the impugned order on this point as well as the submissions made by the learned Counsel for the State Commission, it is clear that the conclusion on this point arrived at by the State Commission is valid and the reasons for such conclusions are justified. The issue is decided as against the Appellant."*

***3.12.4 Thus, the Commission is of the view that these costs are towards the Petitioner's Corporate Social Responsibility and are not necessary for the functioning of any Utility. Accordingly, these expenses should not be passed on to the transmission system users who are beneficiaries of the InSTS as they are not benefiting from the same and thus, these expenses should be borne by the Petitioner. The Petitioner may incur such expenses from the returns earned out of the business."***

5.4.10 The Commission has considered capitalised A&G expenses as per Audited Annual Accounts, and the MSLDC related A&G expenses as sought by MSETCL.

5.4.11 Accordingly, the Commission approves the A&G expenses as per the following Table.

**Table 59: A&G Expenses for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars  | MTR<br>Petition | Approved in<br>this Order |
|--|-----------------|---------------------------|
| Gross A&G Expenses   | 273.41          | 272.60                    |
| Less: Expenses Capitalised   | 13.97           | 13.97                     |
| <b>Net A&amp;G Expenses</b>  | <b>259.43</b>   | <b>258.63</b>             |
| Less: SLDC A & G Expense   | 5.22            | 5.22                      |
| <b>Net A &amp; G Expense after adjustment for<br/>SLDC A &amp; G Expense</b> | <b>254.21</b>   | <b>253.41</b>             |
| Add: Prior Period A&G Expenses   | -               | -                         |
| <b>Total A&amp;G expense</b>   | <b>254.21</b>   | <b>253.41</b>             |

#### 5.4.12 The Commission approves net A&G Expenses of Rs. 253.41 Crore on Truing-up of ARR for FY 2016-17.

### 5.5 Repairs and Maintenance Expenses

#### *MSETCL's Submission*

5.5.1 The R&M expenses for FY 2016-17 are arrived at after taking into consideration the actual R&M expenses as per the Audited Accounts, expenses capitalized and MSLDC R&M expenses.

5.5.2 The major reason for decrease in R&M expenses in FY 2016-17 as compared to FY 2015-16 are as follows:

- MSETCL has framed a policy for Life Extension schemes since February 2016 which includes replacement of old switchyard equipment. These old equipment have been replaced by new equipment which has resulted in reduction in the failure of various switchyard equipment and thereby reduced the R&M expenditure. Total Equipment failure in No. (EHV, CTs, PTs, CBs) in FY 2014-15 was 92, in FY 2015-16 it was 74 and in FY 2016-17 it was 52.
- MSETCL has implemented e-tendering system for R&M works since December, 2015. As there were certain difficulties in implementing the e-tendering system, it has led to reduction in R&M works during FY 2016-17.

5.5.3 The R&M expenses for FY 2016-17 as submitted by MSETCL are shown in the following Table.

**Table 60: R&M Expenses for FY 2016-17 as submitted by MSETCL (Rs. Crore)**

| <b>Repair and Maintenance Expense</b>                                | <b>MSETCL<br/>Petition</b> |
|--|----------------------------|
| Gross R&M Expenses   | 145.31                     |
| Less: Expenses Capitalised   | 1.25                       |
| <b>Net R&amp;M Expenses</b>  | <b>144.06</b>              |
| Less: SLDC R&M Expense   | 1.17                       |
| <b>Net R&amp;M Expense after adjustment for SLDC R&amp;M Expense</b> | <b>142.89</b>              |
| Prior Period R&M expenses  | -                          |
| <b>Net R&amp;M Expenses (after adjustments)</b>                      | <b>142.89</b>              |

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

5.5.4 The Commission has examined the component-wise comparison of actual R&M expenses for FY 2016-17 vis-a-vis FY 2015-16 submitted by MSETCL, as shown in the following Table:

**Table 61: Deviation analysis of R&M Expenses for FY 2016-17 (Rs. Crore)**

| Particulars                   | FY<br>2015-16 | FY<br>2016-17 | Difference     |
|-------------------------------|---------------|---------------|----------------|
|                               | Actual        | Actual        |                |
| Plant and Machinery           | 115.34        | 91.76         | (23.58)        |
| Building Expense              | 4.59          | 4.05          | (0.54)         |
| Civil Expense                 | 34.69         | 33.51         | (1.18)         |
| Hydraulic Work expense        | 0.19          | 0.04          | (0.15)         |
| Line expense                  | 21.17         | 12.53         | (8.64)         |
| Others                        | 10.10         | 1.95          | (8.15)         |
| Vehicles                      | 0.59          | 0.55          | (0.04)         |
| Furniture and Fixtures        | 0.03          | 0.05          | 0.02           |
| Office Equipment              | 0.93          | 0.88          | (0.05)         |
| <b>Gross R&amp;M Expenses</b> | <b>187.62</b> | <b>145.32</b> | <b>(42.31)</b> |

5.5.5 The Commission has examined the submission of MSETCL in respect of R&M expenses including reasons for reduction in these expenses as compared to the previous year, along with the Audited Annual Accounts and has considered the amount booked in the Audited Annual Accounts for the approval of R&M expenses.

5.5.6 The Commission has considered capitalised R&M expenses as per the Audited Annual Accounts, and the MSLDC-related R&M expenses as per MSETCL's submissions.

5.5.7 MSETCL has stated that on account of difficulties in implementing the e-tendering system, there was reduction in R&M works during FY 2016-17 and corresponding reduction in the R&M expenses.

5.5.8 The R&M expenses approved by the Commission are as per the following Table.

**Table 62: R&M Expenses for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars  | MTR<br>Petition | Approved in<br>this Order |
|--|-----------------|---------------------------|
| Gross R&M Expenses   | 145.31          | 145.31                    |
| Less: Expenses Capitalised   | 1.25            | 1.25                      |
| <b>Net R&amp;M Expenses</b>  | <b>144.06</b>   | <b>144.06</b>             |
| Less: SLDC R&M Expense   | 1.17            | 1.17                      |
| <b>Net R&amp;M Expense after adjustment for<br/>SLDC R&amp;M Expense</b> | <b>142.89</b>   | <b>142.89</b>             |
| Add: Prior Period R&M expenses   | -               | -                         |
| <b>Net R&amp;M Expenses</b>  | <b>142.89</b>   | <b>142.89</b>             |

5.5.9 The Commission approves net R&M Expenses of Rs. 142.89 Crore on Truing-up of ARR for FY 2016-17.

## 5.6 Normative and Actual O&M Expenses

- 5.6.1 The Commission has considered the closing balance of actual Bays and Ckt. Km. approved in this Order for FY 2015-16 as the opening balance for FY 2016-17. The Bays and Ckt. Km. added during the year are also considered.
- 5.6.2 The Commission approves the normative O&M expenses based on the actual Bays and Ckt. Km. in FY 2016-17 and the actual O&M expenses for FY 2016-17 as discussed in earlier paragraphs, as per the following Table.

**Table 63: Normative and Actual O&M Expenses for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars                          | MYT Order       | MTR Petition    | Approved in this Order |
|--------------------------------------|-----------------|-----------------|------------------------|
| Normative O&M Expenses               | 1,469.05        | 2,030.45        | 1,736.77               |
| Actual O&M Expenses                  |                 |                 |                        |
| Employee Expense                     |                 | 977.11          | 977.11                 |
| A&G Expense                          |                 | 254.21          | 253.41                 |
| R&M Expense                          |                 | 142.89          | 142.89                 |
| <b>Total Actual O&amp;M Expenses</b> | <b>1,469.05</b> | <b>1,374.21</b> | <b>1,373.41</b>        |

- 5.6.3 The Commission approves the normative O&M Expenses of Rs. 1,736.77 Crore and actual O&M Expenses of Rs. 1,373.41 Crore prior to sharing of efficiency gain/loss, on Truing-up of ARR for FY 2016-17.

## 5.7 Capital Expenditure and Capitalisation

### *MSETCL's Submission*

- 5.7.1 Capitalisation of Rs. 1,393.21 Crore was approved in the MYT Order in Case No. 31 of 2016 considering only those schemes which were approved in-principle. In the present Petition a Capitalisation of Rs. 1,690.69 Crore (wrongly mentioned as Rs. 1,677.65 Crore in the Petition) is claimed based on actual capitalization during the year. The break-up of the capitalisation is as shown in the following table:

**Table 64: Break up of Capitalisation for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Sr. No. | Particulars   | Amount          |
|---------|---|-----------------|
| 1       | Capitalisation as per Books                                 | 1,716.33        |
| 2       | Less: SLDC Capitalisation                                   | 1.58            |
| 3       | Less: Capitalisation claimed under ORC                      | 24.01           |
| 4       | Less: Capitalisation claimed under PSDF                     | 0.02            |
| 5       | Less: Capitalisation claimed under TSP                      | 0.03            |
|         | <b>Total Capitalisation claimed in the revised petition</b> | <b>1,690.69</b> |

5.7.2 The capitalization has been higher than that approved previously by the Commission due to rigorous efforts and follow-up by MSETCL in resolving issues such as RoW and related court cases, requirement of forest clearances in some schemes, delay in land acquisition, delay in availability of police protection, permissions required from Railways, availability of outages etc.

**Table 65: Capitalisation for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars  | MYT Order       | MSETCL Petition |
|--------------|-----------------|-----------------|
| DPR          | 1,213.15        | 1,570.25        |
| Non-DPR      | 180.05          | 120.44          |
| <b>Total</b> | <b>1,393.21</b> | <b>1,690.69</b> |

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

5.7.3 The Commission has elaborated the analysis underlying its approval of the capitalisation for FY 2015-16 to FY 2019-20 in the paras 4.7.3 to 4.7.21 of this Order. Accordingly, the capitalisation for FY 2016-17 approved by the Commission after prudence check is given in the Table below:

**Table 66: Capitalisation for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order | MTR Petition    | Approved in this Order |
|--|-----------|-----------------|------------------------|
| DPR Capitalisation   | 1,393.21  | 1,570.25        | 1,521.82               |
| Non-DPR Capitalisation   |           | 120.44          | 120.44                 |
| Add: Past period disallowed capitalisation approved in FY 2016-17* |           | -               | 23.03                  |
| <b>Total Approved Capitalisation</b>                               |           | <b>1,690.69</b> | <b>1,665.29</b>        |

\* Part of the disallowed capitalisation claimed by MSETCL in the past years (FY 2010-11 to FY 2014-15) are considered for approval in FY 2016-17 by the Commission.

5.7.4 **The Commission approves capitalisation of Rs. 1,665.29 Crore on Truing-up of ARR for FY 2016-17. This includes capitalisation of Rs. 23.03 Crore approved now towards previously disallowed schemes for past years (FY 2010-11 to FY 2014-15) based on actual put to use of assets in FY 2016-17.**

## **5.8 Depreciation**

### ***MSETCL's Submission***

5.8.1 Opening GFA for FY 2016-17 is considered same as the closing GFA for FY 2015-16 approved by the Commission; after considering the impact of disallowed capitalization for FY 2010-11 to 2014-15. Depreciation has been calculated considering the average depreciation rate of 3.89% (i.e. computed average rate considering the depreciation and average GFA during the year as per the Audited

Accounts). The impact of FRP Scheme on Fixed Assets as per Audited Annual Accounts for FY 2016-17 is considered (i.e. depreciation pertaining to this has been excluded while computing average rate) to derive the depreciation rate of 3.89%.

- 5.8.2 The Government of Maharashtra has notified “Maharashtra Electricity Reforms Transfer (First Amendment) Scheme 2016” on 31 March 2016. As per the scheme, the fixed assets taken over by Government of Maharashtra shall be considered to have been transferred to the MSETCL at the market value prevailing on 5 June, 2005. Pursuant to this notification, Net Fixed Assets of MSETCL increased by an amount Rs. 6,288.93 Crore (i.e. difference between old net fixed asset value and new net fixed asset value) in FY 2015-16.
- 5.8.3 Further, Regulation 23.10 of MYT Regulations, 2015 provides for passing on the benefit of revaluation of assets of a Transmission Licensee to its long term Transmission System User in case such revaluation does not affect the Tariff adversely. In view of FRP scheme, assets of MSETCL have been adjusted. However, in line with Regulation 23.10 and directive of Holding company vide letter no. MSEBHCL/FRP/269 dated 7 July 2015, MSETCL’s assets have been adjusted. Accordingly, MSETCL has reduced a depreciation amount by Rs. 106.57 Crore while computing Aggregate Revenue Requirement for FY 2016-17. The asset class-wise break up of depreciation computed on account of FRP scheme is provided as under:

**Table 67: Depreciation on account of FRP scheme for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Sr. No. | Particulars                           | Depreciation  |
|---------|---------------------------------------|---------------|
| 1       | Sub-Station                           | 34.40         |
| 2       | Buildings                             | 0.20          |
| 3       | Hydraulic works                       | 0.00          |
| 4       | Civil Works                           | 1.32          |
| 5       | Lines                                 | 70.09         |
| 6       | Vehicles                              | 0.01          |
| 7       | Furniture & fixtures                  | 0.00          |
| 8       | Computer/printer/UPS/peripherals      | 0.01          |
| 9       | Fax Machine                           | 0.36          |
| 10      | Water Cooler                          | 0.02          |
| 11      | Air conditioner                       | 0.02          |
| 12      | Amortisation of Leasehold land Assets | 0.14          |
| 13      | <b>Total</b>                          | <b>106.57</b> |

- 5.8.4 The summary of the depreciation as approved in the MYT Order in Case No. 31 of 2016 and as claimed in this Petition is shown in the Table below:



**Table 68: Depreciation for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars  | MYT Order | MSETCL Petition |
|--------------|-----------|-----------------|
| Depreciation | 921.21    | 923.18          |

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

5.8.5 The Commission has noted MSETCL's submissions, and has approved the depreciation in line with the MYT Regulations, 2015. The Commission has considered the closing GFA of FY 2015-16 approved in the present Order to compute the opening GFA for FY 2016-17. Further, addition in assets in FY 2016-17 is considered as per the capitalisation approved at para. 4.7 of this Order.

5.8.6 The notes to the Audited Annual Accounts mention that the straight line method is adopted and the asset class wise depreciation rates in the MYT Regulations, 2015 are considered for computation of depreciation charged during the year. The Commission has verified that the impact of FRP is excluded while computing the rate of depreciation. Accordingly, the Commission has computed the applicable depreciation rate by considering the depreciation amount as a percentage of the average of actual opening GFA and closing GFA as per the Audited Annual Accounts for FY 2016-17, which amounts to 3.89% for FY 2016-17, for the calculation of depreciation.

5.8.7 The Commission considered retirement of assets during the year to arrive at the closing balance of assets. Accordingly, depreciation for FY 2016-17 has been computed on the average of opening and closing GFA approved by the Commission and the approved depreciation rate as mentioned earlier.

5.8.8 Accordingly, the Commission approves the depreciation for FY 2016-17 as summarised in the following Table:

**Table 69: Depreciation for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars                                    | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Opening GFA                                    | 22,183.02     | 22,907.79     | 22,534.38              |
| Add: Additional Capitalization during the year | 1,393.21      | 1,690.69      | 1,665.29               |
| Less: Retirement/Adjustments                   | 53.85         | 5.03          | 5.03                   |
| Closing GFA                                    | 23,522.37     | 24,593.45     | 24,194.65              |
| Average Depreciation Rate                      | 4.03%         | 3.89%         | 3.89%                  |
| <b>Total Depreciation</b>                      | <b>921.22</b> | <b>923.18</b> | <b>908.17</b>          |

**5.8.9 The Commission approves Depreciation of Rs. 908.17 Crore on Truing-up of ARR for FY 2016-17.**

## 5.9 Interest on Long Term Loans

### *MSETCL's Submission*

- 5.9.1 The Interest on Long Term Loans is computed in accordance with the Regulation 29 of MYT Regulations, 2015. The closing balance of loan of FY 2015-16 submitted in this Petition, is considered as the opening balance of loan for FY 2016-17. A weighted average debt-equity ratio of 79.93:20.07 is considered for funding the capitalisation.
- 5.9.2 With regard to retirement of assets, in the books of accounts, assets not in use include 10% residual value of assets for which 90% depreciation has already been charged. Hence, the same has been considered as retirement of assets during the year. Further, where assets have been considered for scrapping, the same will also be considered for retirement. The total retirement of assets for FY 2016-17 has been computed as Rs. 5.03 Crore.
- 5.9.3 MSETCL has considered repayment of normative loan equal to the depreciation. The actual interest rate considered is higher than the rate approved in the MYT Order in Case No. 31 of 2016 for the FY 2016-17. The weighted-average rate of interest across the year is considered for computation of the interest on the normative loan. This interest rate is applied to the average of opening balance and closing balance of loan for the year to compute the interest expense on the normative long term loans.
- 5.9.4 Long term loans are availed from major Financial Institutions (FI), viz., PFC, JICA, REC, IFC, Bank of Baroda, Union Bank of India, Bank of Maharashtra and Oriental Bank of Commerce to fund the capital expenditure.

**Table 70: Interest on Long Term Loans for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | MYT Order | MSETCL Petition |
|-----------------------------|-----------|-----------------|
| Interest on Long Term Loans | 786.12    | 895.33          |

### *Commission's Analysis and Ruling*

- 5.9.5 The Commission has considered the opening balance of loan for FY 2016-17 as the closing balance of loan for FY 2015-16 as approved in this Order. The Commission observes that MSETCL has funded different capital expenditure schemes at different debt:equity ratios of 80:20, 75:25 and 70:30 and accordingly computed a weighted average debt-equity ratio of 79.93:20.07 for FY 2016-17. The Commission has computed a weighted average debt-equity ratio of 79.87:20.13 for capitalisation of FY 2016-17.

5.9.6 The Commission has considered the repayment of normative loan equal to the depreciation approved for FY 2016-17 in this Order.

5.9.7 The reduction of loans due to retirement of assets is considered as submitted by MSETCL. The Commission has examined the computation for weighted average interest rate for the loan portfolio during the FY 2016-17 as well as the documentary evidence substantiating the same, and considered this rate for computing the interest expenses for FY 2016-17.

5.9.8 The Commission in the MYT Order in Case No. 31 of 2016, had ruled the following:

*“6.5.8 The weighted average rate of interest on the loan portfolio at the beginning of FY 2016-17, as submitted by MSETCL, is 11.19%. However, as elaborated at paras. 5.9.9 to 5.9.11, the Commission has taken the interest rate of 10.75%, and applied it to the average of opening and closing balance of loan for the year to compute the interest expense on normative long term loans. Any variation in the interest rate shall be dealt with at the time of Truing-up. In case the actual interest rates are higher, no carrying cost shall be allowed on any under-recovery in the Interest on Long Term Loans.”*

5.9.9 In view of the above, the Commission has computed the interest expenses on the approved normative loan for FY 2015-16 by applying the interest rate of 10.75% approved in the MYT Order as well as the weighted average interest rate considered in the present Order at 10.99%. The difference of these two values of interest expenses is excluded while computing the carrying/holding cost. The computation of carrying/holding cost is dealt with in subsequent Sections of this Order.

5.9.10 The interest expenses for FY 2016-17 approved by the Commission are as shown in the Table below.

**Table 71: Interest on Long Term Loans for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Opening Balance of Net Normative Loan  | 7,240.59      | 7,934.76      | 7,660.54               |
| Retirement of Assets   | 53.85         | 5.03          | 5.03                   |
| Debt % considered for reduction in loan due to retirement/adjustment of assets | 80.00%        | 80.00%        | 80.00%                 |
| Less: Reduction of Normative Loan due to retirement or replacement of assets   | 43.08         | 4.02          | 4.02                   |
| Total Capitalization   | 1,393.21      | 1,690.69      | 1,665.29               |
| Debt Component   | 79.58%        | 79.93%        | 79.87%                 |
| Addition of Normative Loan due to capitalisation                               | 1,108.68      | 1,351.32      | 1,330.00               |
| Repayment of Normative loan during the year                                    | 921.22        | 923.18        | 908.17                 |
| Closing Balance of Net Normative Loan  | 7,384.97      | 8,358.87      | 8,078.34               |
| Weighted average Rate of Interest on actual Loans (%)                          | 10.75%        | 10.99%        | 10.99%                 |
| <b>Interest Expenses</b>   | <b>786.12</b> | <b>895.33</b> | <b>864.85</b>          |

**5.9.11 The Commission approves Interest on Long Term Loans as Rs. 864.85 Crore on Truing-up of ARR for FY 2016-17.**

## **5.10 Other Interest and Finance Charges**

### ***MSETCL's Submission***

5.10.1 The table below provides the actual other interest and finance charges for FY 2016-17:

**Table 72: Other Interest and Financing Charges for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars                          | MYT Order | MSETCL Petition |
|--------------------------------------|-----------|-----------------|
| Other Interest and Financing Charges | 5.46      | 0.69            |

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

5.10.2 The Commission has examined the submissions of MSETCL regarding the other interest and financing charges including the break up and reconciliation with the Audited Annual Accounts provided vide response to data gaps. The break-up of other interest and financing charges includes Rs. 0.32 Crore towards Service Fee, Rs. 0.08 Crore towards bank charges, Rs. 0.07 Crore towards guarantee charges and Rs. 0.22 Crore towards debt restructuring premium. Accordingly, the Commission approves the same as shown in the Table below.

**Table 73: Other Interest and Financing Charges for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars                        | MYT Order | MTR Petition | Approved in this Order |
|------------------------------------|-----------|--------------|------------------------|
| Other interest and finance charges | 5.46      | 0.69         | 0.69                   |

**5.10.3 The Commission approves the actual Interest and Finance Charges of Rs. 0.69 Crore on Truing-up of ARR for FY 2016-17, as claimed by MSETCL.**

## **5.11 Interest on Working Capital**

### ***MSETCL's Submission***

5.11.1 As per Regulation 31.2 of MYT Regulations, 2015, IoWC has been computed based on the norms and the actual audited elements of ARR like O&M expenses, Gross Fixed Assets and revenue from Transmission Charges.

5.11.2 The MYT Regulations, 2015 stipulate that for the purpose of Truing up, the rate of interest on working capital shall be equal to weighted average Base Rate prevailing during the concerned year plus 1.5%. A weighted average Base Rate of 9.29% plus 1.5% is considered for FY 2016-17. Hence, the applicable rate of 10.79% has been considered for determining normative Interest on Working Capital. However, MSETCL has considered the actual Interest on Working Capital paid during FY 2016-17 for Truing up.

5.11.3 MSETCL has utilized its internal accruals for funding its working capital requirements. Due to effective management of cash flows, it was able to prudently meet its working capital requirement in FY 2016-17. The details of the IoWC claimed by MSETCL are shown in the Table below:

**Table 74: Interest on Working Capital for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | MYT Order | Normative | MSETCL Petition |
|-----------------------------|-----------|-----------|-----------------|
| Interest on Working Capital | 58.06     | 63.76     | 42.72           |

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

5.11.4 The Commission scrutinized the submissions of MSETCL with regard to the computation of IoWC and estimated normative working capital requirement in accordance with Regulation 31.2 of the MYT Regulations, 2015 as follows:

- Revised normative O&M expenses based on the actual Bays and Ckt. Km. as approved in this Order for FY 2016-17 are considered for calculating working capital requirements.
- Maintenance spares at 1% of approved opening GFA for FY 2016-17.
- Revenue from Transmission Charges from the TSUs for April to June, 2016 is considered at Rs. 670.98 Crore (at Rs. 223.66 Crore per month as per the InSTS Tariff Order in Case No. 57 of 2015) and for July, 2016 to March, 2017 at Rs. 1,308.51 Crore (at Rs. 145.39 Crore per month as per InSTS Tariff Order in Case No. 91 of 2016) i.e. a total revenue of Rs. 1,979.51 Crore.

5.11.5 The Commission has computed the interest rate for IoWC by adding the weighted average Base Rate during FY 2016-17 i.e. 9.29% and 150 basis points i.e. 1.50% to derive a total of 10.79% in line with the provisions of the Regulation 31.2 (b) of the MYT Regulations, 2015 and which is also same as MSETCL's submission.

5.11.6 The Commission verified the Annual Accounts and observed that there is no security deposit from TSUs.

5.11.7 The normative IoWC approved by the Commission for FY 2016-17 is as given in the Table below.

**Table 75: Interest on Working Capital for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars   | MYT Order    | MTR Petition  | Approved in this Order |
|---|--------------|---------------|------------------------|
| Operations and Maintenance Expenses for one month   |              | 114.52        | 144.73                 |
| Maintenance Spares @1% of the Opening GFA   |              | 229.08        | 225.34                 |
| One and a half months of the expected revenue from transmission charges at the prevailing tariffs |              | 247.44        | 247.44                 |
| Less: Amount of Security Deposit from Transmission System Users                                   |              | -             | -                      |
| <b>Total Working Capital Requirement</b>  |              | <b>591.03</b> | <b>617.51</b>          |
| Interest Rate (%)   |              | 10.79%        | 10.79%                 |
| <b>Normative Interest on Working Capital</b>  | <b>58.06</b> | <b>63.76</b>  | <b>66.62</b>           |

5.11.8 **The Commission approves the normative IoWC of Rs. 66.62 Crore on Truing-up of ARR for FY 2016-17. The net entitlement of MSETCL towards the IoWC after sharing of efficiency gains/losses is set out subsequently.**

## 5.12 Return on Equity

### *MSETCL's Submission*

5.12.1 MSETCL has worked out the Return on Equity for FY 2016-17 in accordance with the Regulation 28 of the MYT Regulations, 2015. Regulatory equity at the beginning of FY 2016-17 has been considered the same as the closing balance of regulatory

equity of FY 2015-16 calculated after taking into account the impact of capitalization claimed against the disallowed capitalization for FY 2010-11 to 2014-15.

5.12.2 MSETCL has considered debt-equity ratio of 80:20 till FY 2015-16 and 75:25 FY 2016-17 onwards. Therefore, for computation of Return on Equity, it has considered weighted average debt equity ratio, FY 2016-17 onwards. The same is computed at 79.93:20.07 for FY 2016-17.

5.12.3 Reduction in equity due to retirement/adjustments of assets in FY 2016-17 has been considered as 20% of actual retirement of assets/adjustments. As per direction of the Holding Company, MSETCL has considered RoE of 7.5% against the rate of 15.5% specified in the MYT Regulations, 2015, as shown in the following Table:

**Table 76: Return on Equity for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars      | MYT Order | MSETCL Petition |
|------------------|-----------|-----------------|
| Return on Equity | 410.62    | 423.98          |

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

5.12.4 As per the principle for RoE computation specified in the MYT Regulations, 2015, the Commission considered the closing balance of regulatory equity for FY 2015-16 approved in this Order, as the opening balance of equity for FY 2016-17. Addition in equity due to approved capitalisation in FY 2016-17 is considered at the weighted average debt-equity ratio of 79.87-20.13 computed by the Commission.

5.12.5 The Commission has considered retirement of assets as submitted by MSETCL based on the Audited Annual Accounts for FY 2016-17, and reduced equity to the extent of 20% of the value of retired assets.

5.12.6 The Commission has computed RoE at the rate of 7.5% in line with the stand taken in the MYT Order in Case No. 31 of 2016 and as sought by MSETCL in the present Petition. RoE as approved by the Commission for FY 2016-17 is set out in the Table below.

**Table 77: Return on Equity for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Regulatory Equity at the beginning of the year                               | 5,338.01      | 5,483.90      | 5,410.53               |
| Capitalisation during the year   | 1,393.21      | 1,690.69      | 1,665.29               |
| Consumer Contribution and Grants used during the year for Capitalisation     | -             | -             | -                      |
| Equity portion of capitalisation during the year                             | 284.52        | 339.37        | 335.29                 |
| Reduction in Equity Capital on account of retirement / replacement of assets | 10.77         | 1.01          | 1.01                   |
| Regulatory Equity at the end of the year                                     | 5,611.76      | 5,822.26      | 5,744.81               |
| <b>RoE %</b>   | <b>7.50%</b>  | <b>7.50%</b>  | <b>7.50%</b>           |
| Return on Regulatory Equity at the beginning of the year                     | 400.35        | 411.29        | 405.79                 |
| Return on Equity portion of capitalisation during the year                   | 10.27         | 12.69         | 12.54                  |
| <b>Total Return on Regulatory Equity</b>                                     | <b>410.62</b> | <b>423.98</b> | <b>418.33</b>          |

**5.12.7 The Commission approves Return on Equity of Rs. 418.33 Crore on Truing-up of ARR for FY 2016-17.**

### 5.13 Income Tax

#### *MSETCL's Submission*

5.13.1 In accordance with MYT Regulations, 2015, MSETCL has claimed Income Tax as a part of ARR for FY 2016-17. The Current Tax has been paid as per the provisions of the Income Tax Act, 1961 in respect of Taxable Income for the year, after considering permissible tax exemption, reduction/disallowance.

5.13.2 Income Tax of Rs. 90.11 Crore was claimed in the MYT Petition applying MAT rate of 21.34% on RoE. Vide the MYT Order in Case No. 31 of 2016, Income Tax of Rs. 111.41 Crore was approved. Since revenue from Transmission Charges for FY 2016-17 has reduced to Rs. 1,979.51 Crore as compared to Rs. 3,386.34 Crore as claimed in the MYT petition, the actual Income Tax for FY 2016-17 has reduced to Rs. 11.45 Crore based on provisions of Income Tax Act, 1961.

5.13.3 MSETCL has sought actual Income Tax paid for FY 2016-17. The Income Tax as approved in the MYT Order in Case No. 31 of 2016 and actual Income Tax based on the revenue and expenses of FY 2016-17 is shown in the table below.

**Table 78: Income Tax for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars | MYT Order | MSETCL Petition |
|-------------|-----------|-----------------|
| Income Tax  | 111.41    | 11.45           |



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

5.13.4 The Commission has examined the Income Tax Return as well as the Income Tax computation submitted by MSETCL.

5.13.5 The MYT Regulations, 2015 stipulate that Income Tax on account of efficiency gains and incentive as well as Delayed Payment Charges (DPC) or Interest on DPC and income from Other Business shall not be a pass through:

*“33.1 The Commission, in its MYT Order, shall provisionally approve Income Tax payable for each year of the Control Period based on the actual Income Tax paid by the Generating Company or Licensee or MSLDC, in case the Generating Company or Licensee or MSLDC has not engaged in any other regulated or unregulated Business or Other Business, as allowed by the Commission relating to the electricity Business regulated by the Commission, as per latest available Audited Accounts, subject to prudence check:*

*Provided further that no Income Tax shall be considered on the amount of income from Delayed Payment Charges or Interest on Delayed Payment or Income from Other Business, as well as on the income from any source that has not been considered for computing the Aggregate Revenue Requirement:*

*Provided also that no Income Tax shall be considered on the amount of efficiency gains and incentive approved by the Commission, irrespective of whether or not the amount of such efficiency gains and incentive are billed separately.”*

5.13.6 Income Tax is also payable by MSETCL on the efficiency gains and incentive earned during the year as well as on the DPC, interest on DPC and income from Other Business. Hence, to give effect to the Regulations, the efficiency gains and incentive recoverable by MSETCL for FY 2016-17 as approved in this Order as well as the DPC of Rs. 855 Crore booked in the Audited Accounts of FY 2016-17 have been deducted from the taxable income submitted by MSETCL in its Petition. The Commission has re-computed the Income Tax payable considering the revised taxable income and keeping all the other elements unchanged as per MSETCL's submission, which amounts to Nil Income Tax liability.

5.13.7 Considering the above, the Commission approves Income Tax expenses as shown in the Table below.

**Table 79: Income Tax for FY 2016-17 approved by Commission (Rs. Crore)**

| <b>Particulars</b> | <b>MYT Order</b> | <b>MTR Petition</b> | <b>Approved in this Order</b> |
|--------------------|------------------|---------------------|-------------------------------|
| Income Tax         | 111.41           | 11.45               | -                             |

### 5.13.8 The Commission approves Nil Income Tax on Truing-up of ARR for FY 2016-17.

## 5.14 Contribution towards Contingency Reserves

### *MSETCL's Submission*

5.14.1 Contribution towards Contingency Reserves is made in accordance with Regulation 34 of MYT Regulations, 2015 and within the prescribed limits (between 0.25 % and 0.5 % of the original cost of fixed assets annually), and is invested in the approved class of securities authorized under the Indian Trusts Act, 1882. The investment towards Contingency Reserves has been made in FY 2017-18 instead of FY 2016-17 owing to cash flow constraints. The Contribution to Contingency Reserves as per the Audited Accounts is as per the following Table.

**Table 80: Contribution to Contingency Reserves for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars                          | MYT Order | MSETCL Petition |
|--------------------------------------|-----------|-----------------|
| Contribution to Contingency Reserves | 55.46     | 57.27           |

### *Commission's Analysis and Ruling*

5.14.2 The Commission has verified that the accumulated Contingency Reserves of MSETCL do not exceed 5% of the original cost of fixed assets as stipulated in the MYT Regulations, 2015. The Commission sought documentary evidence substantiating the actual investment of the contingency reserves in approved class of securities, however, MSETCL was unable to submit the same. Moreover, vide response to data gaps as well as in its revised Petition MSETCL submitted that it has invested the contribution towards Contingency Reserves pertaining to FY 2016-17 in the approved securities in the FY 2017-18 owing to cash flow constraints.

5.14.3 The MYT Regulations, 2015 provide that:

*“34.1 Where the Licensee has made a contribution to the Contingency Reserve, a sum not less than 0.25 per cent and not more than 0.5 per cent of the original cost of fixed assets shall be allowed annually towards such contribution in the calculation of Aggregate Revenue Requirement:”*

5.14.4 In view of the foregoing, since MSETCL has booked the contribution towards Contingency Reserves in the Audited Accounts for FY 2016-17 however, not actually invested the same, the Commission is not inclined to approve the same in FY 2016-17. However, considering the submission of MSETCL, the Commission has provisionally approved this contribution towards Contingency Reserves pertaining to FY 2016-17 in FY 2017-18, subject to True up.

5.14.5 The contribution to Contingency Reserves approved by the Commission is shown in the Table below.

**Table 81: Contribution towards Contingency Reserves for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars                          | MYT Order | MTR Petition | Approved in this Order |
|--------------------------------------|-----------|--------------|------------------------|
| Contribution to Contingency Reserves | 55.46     | 57.27        | -                      |

5.14.6 The Commission has not approved any contribution towards Contingency Reserves on Truing-up of ARR for FY 2016-17. However, the same has been provisionally approved in FY 2017-18, subject to True up.

### 5.15 Revenue from Transmission Charges, Income from Wheeling Charges and Point of Connection (PoC) Charges

#### *MSETCL's Submission*

5.15.1 The revenue from Transmission Tariff allowed per month for April, 2016 to March, 2017 was Rs. 1,979.51 Crore (as per InSTS Order in Case No. 57 of 2015 for the period April to June, 2016 and InSTS Order in Case No. 91 of 2016 for the period July, 2016 to March, 2017), and the same has been considered for Truing-up.

5.15.2 MSETCL also earned revenue for wheeling Central Sector power to Goa and Dadra and Nagar Haveli and other Generators, as shown in the Audited Accounts which is considered for Truing up.

5.15.3 MSETCL has also earned revenue from Point of Connection (PoC) charges for Inter-State Transmission System (ISTS) lines for FY 2016-17.

5.15.4 MSETCL has shown the following revenue from Transmission Tariff and other sources:

**Table 82: Revenue from Transmission Charges and other sources for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars   | MYT Order | MSETCL Petition |
|---|-----------|-----------------|
| Revenue from Transmission Tariff  | 1,744.70  | 1,979.51        |
| Revenue from Wheeling Charges from Goa and Dadra & Nagar Haveli and other sources | 61.91     | 43.62           |
| PoC Charges for Inter-State Lines (ISTS)  | 178.55    | 97.68           |

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

5.15.5 The Commission has considered the approved revenue as per the InSTS Tariff Orders, which is also set out by MSETCL in its Petition, as the revenue recovered from

Transmission charges; and income from Dadra & Nagar Haveli Wheeling Charges and PoC Charges for wheeling Inter-State power to Goa, as verified from the Audited Annual Accounts. Accordingly, the revenue from Transmission Charges and other sources as approved by the Commission is given in the Table below:

**Table 83: Revenue from Transmission Charges and other sources for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars   | MYT Order | MTR Petition | Approved in this Order |
|---|-----------|--------------|------------------------|
| Revenue from Transmission Charges   | 1,744.70  | 1,979.51     | 1,979.51               |
| Income from Wheeling Charges from Goa, Dadra and Nagar Haveli and other sources | 61.91     | 43.62        | 43.62                  |
| Income from PoC charges for Inter-State lines                                   | 178.55    | 97.68        | 97.68                  |

**5.15.6 The Commission approves revenue from Transmission Tariff as Rs. 1,979.51 Crore, income from Goa, Dadra & Nagar Haveli and other sources towards Wheeling Charges as Rs. 43.62 Crore, and PoC Charges for Inter-State Transmission Lines as Rs. 97.68 Crore on Truing-up of ARR for FY 2016-17.**

## 5.16 Non-Tariff Income

### *MSETCL's Submission*

5.16.1 Non-Tariff Income has decreased in FY 2016-17 over FY 2015-16 primarily on account of decrease in revenue from Short Term Open Access Charges. It includes the interest earned on Contingency Reserves and other investment, revenue from Open Access Charges, excess provision written back, other miscellaneous income, etc.

**Table 84: Non-Tariff Income for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars       | MYT Order | MSETCL Petition |
|-------------------|-----------|-----------------|
| Non-Tariff Income | 229.97    | 167.51          |

### *Commission's Analysis and Ruling*

5.16.2 The Commission verified the details from the Audited Annual Accounts, and approves the Non-Tariff Income for FY 2016-17 as per the following Table.

**Table 85: Non-Tariff Income for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars       | MYT Order | MTR Petition | Approved in this Order |
|-------------------|-----------|--------------|------------------------|
| Non-Tariff Income | 229.97    | 167.51       | 167.51                 |

### 5.16.3 The Commission approves Rs. 167.51 Crore as Non-Tariff Income on Truing-up of ARR for FY 2016-17.

## 5.17 Incentive on Transmission System Availability

### *MSETCL's Submission*

5.17.1 MSETCL has sought incentive on Transmission System Availability as per the following Table.

**Table 86: Incentive on Transmission System Availability for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars  | Incentive    |
|--------------|--------------|
| HVAC         | 18.80        |
| HVDC         | 5.70         |
| <b>Total</b> | <b>24.50</b> |

### *Commission's Analysis and Ruling*

5.17.2 The Commission noted that MSETCL has considered the incorrect availability benchmarks for computing the incentive for FY 2016-17 i.e. 98% for HVAC instead of 99% and 95% for HVDC instead of 96%. The Commission has considered the availability benchmarks for computing incentive in line with the MYT Regulations, 2015. The Commission verified the actual Availability from the MSLDC certification. Accordingly, the Commission has allowed incentive on Transmission System Availability as follows:

**Table 87: Incentive on Transmission System Availability for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars  | Actual Availability (%) | Target Availability (%) | ARR of FY 2016-17 | % Allocation of ARR | ARR Allocation | Incentive    |
|--------------|-------------------------|-------------------------|-------------------|---------------------|----------------|--------------|
| HVAC         | 99.64%                  | 99.00%                  | 3,299.36          | 85.04%              | 2,805.77       | 18.66        |
| HVDC         | 97.07%                  | 96.00%                  |                   | 14.96%              | 493.58         | 5.49         |
| <b>Total</b> |                         |                         |                   |                     |                | <b>24.15</b> |

5.17.3 The Commission approves the incentive of Rs. 24.15 Crore for higher Transmission System Availability on Truing-up of ARR for FY 2016-17.

## 5.18 Sharing of gains/losses

### *MSETCL's Submission*

### **O&M Expenses**

5.18.1 The summary of the sharing of efficiency gain/(loss) for O&M expenses based on the controllable and uncontrollable parameters is as shown in the following Table.

**Table 88: Sharing of efficiency gain/(loss) for O&M Expenses for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars  | Normative for FY 2016-17 | Audited/ Actual for FY 2016-17 | Entitlement as per Regulation /Order | Efficiency Gain/(Loss) | Efficiency Gain/(Loss) shared with TSUs | Net Entitlement of MSETCL |
|--------------|--------------------------|--------------------------------|--------------------------------------|------------------------|---|---------------------------|
| O&M Expenses | 2,030.45                 | 1,374.21                       | 2,030.45                             | 656.24                 | 437.49                                  | 1,592.96                  |

### Interest on Working Capital

5.18.2 In accordance with the MYT Regulations, 2015, IoWC needs to be treated as efficiency gain if the actual interest paid on working capital is less than the normative. Hence, the difference of IoWC computed based on norms and actual IoWC has been considered as efficiency gain. The computation of efficiency gain is given below:

**Table 89: Sharing of efficiency gain/(loss) for Interest on Working Capital for FY 2015-16, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | Normative for FY 2016-17 | Audited/ Actual for FY 2016-17 | Entitlement as per Regulation /Order | Efficiency Gain/(Loss) | Efficiency Gain/(Loss) shared with TSUs | Net Entitlement of MSETCL |
|-----------------------------|--------------------------|--------------------------------|--------------------------------------|------------------------|---|---------------------------|
| Interest on Working Capital | 63.76                    | 42.72                          | 63.76                                | 21.04                  | 14.03                                   | 49.73                     |

### Commission's Analysis and Ruling

5.18.3 The Commission has re-computed the normative O&M expenses based on the actual number of Bays and Ckt. Km. for FY 2016-17. The O&M expenses have been considered as controllable expenses. The efficiency gain/loss on the difference between the revised normative and the actual approved O&M expenses is computed as per the MYT Regulations, 2015. 2/3<sup>rd</sup> of the efficiency gain is shared with the TSUs, and the remaining is added to the net entitlement of O&M expenses of MSETCL, in line with the Regulations.

5.18.4 In the case of IoWC, the efficiency gain / loss is computed as the difference between the actual IoWC incurred in FY 2016-17, substantiated by documentary evidence submitted by MSETCL in the form of an extract of its trial balance for FY 2016-17 for the relevant head and the normative IoWC approved by the Commission after considering other elements of expenditure and revenue as approved after Truing-up.

5.18.5 2/3<sup>rd</sup> of the efficiency gain on this account is shared with the TSUs, and the remaining is added to the net entitlement of IoWC of MSETCL, in line with the Regulations.

5.18.6 The summary of sharing of efficiency gains/(losses) as approved by the Commission is shown in the Table below.

**Table 90: Sharing of efficiency gain/(loss) due to variation in O&M Expenses and Interest on Working Capital for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars                      | Normative for FY 2016-17 | Audited/ Actual for FY 2016-17 | Entitlement as per Regulation/ Order | Efficiency Gain/(Loss) | Efficiency Gain/(Loss) shared with TSUs | Net Entitlement of MSETCL |
|----------------------------------|--------------------------|--------------------------------|--------------------------------------|------------------------|---|---------------------------|
| Operation & Maintenance Expenses | 1,736.77                 | 1,373.41                       | 1,736.77                             | 363.36                 | 242.24                                  | 1,494.53                  |
| Interest on Working Capital      | 66.62                    | 42.72                          | 66.62                                | 23.90                  | 15.93                                   | 50.69                     |

5.18.7 The Commission approves the net entitlement against O&M Expenses at Rs. 1,494.53 Crore, and against Interest on Working Capital at Rs. 50.69 Crore, after sharing of efficiency gains, on Truing-up of ARR for FY 2016-17.

## 5.19 Summary of Truing-up of ARR for FY 2016-17

### *MSETCL's Submission*

5.19.1 The summary of the True up of ARR for FY 2016-17, as submitted by MSETCL is shown in the following Table:

**Table 91: Summary of Truing-up of ARR for FY 2016-17, as submitted by MSETCL (Rs. Crore)**

| Particulars  | Order in Case No. 31 of 2016 | Normative | FY 2016-17 Audited (Actual) | Net Entitlement after sharing of gain/(Loss) |
|--|------------------------------|-----------|-----------------------------|--|
| Operation & Maintenance Expenses   | 1,469.05                     | 2,030.45  | 1,374.21                    | 1,592.96                                     |
| Depreciation Expenses  | 921.22                       | -         | 923.18                      | 923.18                                       |
| Interest on Loan Capital   | 786.12                       | -         | 895.33                      | 895.33                                       |
| Other Interest and Finance Charges   | 5.46                         | -         | 0.69                        | 0.69   |
| Interest on Working Capital  | 58.06                        | 63.76     | 42.72                       | 49.73  |
| Income Tax   | 111.41                       | -         | 11.45                       | 11.45  |
| Contribution to Contingency Reserves   | 55.46                        | -         | 57.27                       | 57.27  |
| <b>Total Revenue Expenditure</b>   | <b>3,406.79</b>              | -         | <b>3,304.86</b>             | <b>3,530.62</b>                              |
| Add: Return on Equity Capital  | 410.62                       | -         | 423.98                      | 423.98                                       |
| <b>Aggregate Revenue Requirement</b>   | <b>3,817.40</b>              | -         | <b>3,728.84</b>             | <b>3,954.60</b>                              |
| Less: Non-Tariff Income  | 229.97                       | -         | 167.51                      | 167.51                                       |
| Less: Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 61.91                        | -         | 43.62                       | 43.62  |
| Less: Income from PoC charges for Inter-State lines                                      | 178.55                       | -         | 97.68                       | 97.68  |



| Particulars  | Order in Case No. 31 of 2016 | Normative | FY 2016-17 Audited (Actual) | Net Entitlement after sharing of gain/(Loss) |
|--|------------------------------|-----------|-----------------------------|--|
| <b>Aggregate Revenue Requirement from Transmission</b>                   | <b>3,346.97</b>              | -         | <b>3,420.02</b>             | <b>3,645.78</b>                              |
| Add: Incentive on higher Transmission System Availability of HVAC System | -                            | -         | 18.80                       | 18.80  |
| Add: Incentive on higher Transmission System Availability of HVDC System | -                            | -         | 5.70                        | 5.70   |
| <b>Revenue from Transmission Tariff</b>                                  | -                            | -         | <b>1,979.51</b>             | <b>1,979.51</b>                              |
| Revenue Gap/(Surplus) for current year                                   | -                            | -         | -                           | 1,690.78                                     |
| Impact of past period disallowed capitalisation                          | 8.23                         | -         | -                           | -  |
| Revenue Gap/(Surplus) till previous year                                 | (1,337.79)                   | -         | -                           | (593.85)                                     |
| Carrying/(Holding) Cost  | (272.71)                     | -         | -                           | -  |
| <b>Cumulative Revenue Gap/(Surplus) till the year</b>                    | <b>(1,602.28)</b>            | -         | -                           | <b>1,096.93</b>                              |

### *Commission's Analysis and Ruling*

5.19.2 The summary of the net ARR and efficiency gains, as approved by the Commission for FY 2016-17, is shown in the following Table:



**Table 92: Summary of Truing-up of ARR for FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order       | Normative | Actual          | Net Entitlement after sharing of gain/(loss) |
|--|-----------------|-----------|-----------------|--|
| Operation & Maintenance Expenses   | 1,469.05        | 1,736.77  | 1,373.41        | 1,494.53                                     |
| Depreciation Expenses  | 921.22          | -         | 908.17          | 908.17                                       |
| Interest on Loan Capital   | 786.12          | -         | 864.85          | 864.85                                       |
| Other Interest and Finance Charges   | 5.46            | -         | 0.69            | 0.69   |
| Interest on Working Capital  | 58.06           | 66.62     | 42.72           | 50.69  |
| Income Tax   | 111.41          | -         | -               | -  |
| Contribution to contingency reserves   | 55.46           | -         | -               | -  |
| <b>Total Revenue Expenditure</b>   | <b>3,406.79</b> | -         | <b>3,189.85</b> | <b>3,318.94</b>                              |
| Add: Return on Equity Capital  | 410.61          | -         | 418.33          | 418.33                                       |
| <b>Aggregate Revenue Requirement</b>   | <b>3,817.40</b> | -         | <b>3,608.18</b> | <b>3,737.26</b>                              |
| Less: Non Tariff Income  | 229.97          | -         | 167.51          | 167.51                                       |
| Less: Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 61.91           | -         | 43.62           | 43.62  |
| Less: Income from PoC charges for Inter-State lines                                      | 178.55          | -         | 97.68           | 97.68  |
| <b>Aggregate Revenue Requirement from Transmission</b>                                   | <b>3,346.97</b> | -         | <b>3,299.36</b> | <b>3,428.44</b>                              |
| Add: Impact of Disallowed Capitalisation allowed in Case No. 31 of 2016                  | -               | -         | -               | 8.23   |
| Add: Carrying Cost / (Holding Cost) allowed in Case No. 31 of 2016                       | -               | -         | -               | (272.71)                                     |
| Add: Incentive on higher Transmission System Availability                                | -               | -         | 24.15           | 24.15  |
| Revenue from Transmission Tariff   | -               | -         | 1,979.51        | 1,979.51                                     |
| <b>Revenue Gap/(Surplus) for current year</b>  | -               | -         | -               | <b>1,208.61</b>                              |
| Revenue Gap/(Surplus) till previous year   | -               | -         | -               | (1,372.75)                                   |
| <b>Cumulative Revenue Gap/(Surplus) till the year</b>                                    | -               | -         | -               | <b>(164.15)</b>                              |

5.19.3 The detailed analysis underlying the Commission's approval of individual ARR elements on Truing up of ARR for FY 2016-17 is already set out above, however, the variation in the ARR sought by the MSETCL and that approved by the Commission in this Order is mainly on account of lower approval of capitalisation which impacts the depreciation, Interest on Long Term Loans, RoE, IoWC and Availability Incentive approved by the Commission. Further, the Commission has computed the Income Tax liability of MSETCL excluding the efficiency gains and Availability Incentive in line with the MYT Regulations, 2015, which is nil in the case of FY 2016-17. Moreover, the contribution to Contingency Reserves for FY 2016-17 is allowed in FY 2017-18 based on MSETCL's submission that they have been invested in the approved securities in FY 2017-18.

5.19.4 The Commission approves a cumulative Revenue Surplus of Rs. 164.15 Crore on Truing-up of ARR for FY 2016-17, considering the efficiency gain and incentive for the year, to be recovered in the ARR for FY 2018-19. The carrying/holding cost on the Revenue Gap/Surplus for FY 2016-17 after Truing-up is dealt with in subsequent Sections of this Order.

## 6 PROVISIONAL TRUING-UP OF ARR FOR FY 2017-18

### 6.1 Background

- 6.1.1 MSETCL has sought provisional Truing-up of ARR for FY 2017-18 as per provisional (unaudited) financial figures for FY 2017-18, under the MYT Regulations, 2015.
- 6.1.2 The detailed analysis underlying the Commission's approval of various ARR elements for the provisional Truing-up for FY 2017-18 is set out below. The final approvals shall be accorded based on Audited Annual Accounts and prudence check at the time of Truing-up.

### 6.2 Operation & Maintenance Expenses

#### *MSETCL's Submission*

- 6.2.1 O&M expenses comprise employee expenses, A&G expenses and R&M expenses. Normative O&M expenses in the MYT Order in Case No. 31 of 2016 were approved at Rs. 1,542.51 Crore considering the methodology of 5% escalation year-on-year for FY 2015-16 and FY 2016-17, proposed by MSETCL.
- 6.2.2 As per the provisions of MYT Regulations, 2015, normative O&M Expenses for FY 2017-18 are computed at Rs. 2,214.93 Crore. O&M Expenses on normative basis may result in significant over recovery and higher tax liability. Therefore, it has estimated O&M expenses on the provisional (unaudited) financial figures for FY 2017-18. However, if the actual O&M expenses turn out to be higher, the shortfall may be allowed at the time of final Truing up.

**Table 93: O&M Expenses for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars                                 | FY 2017-18      |                  |                 |
|---|-----------------|------------------|-----------------|
|   | MYT Order       | Normative        | MSETCL Petition |
| <b>Operation &amp; Maintenance Expenses</b> | <b>1,542.51</b> | <b>2,214.93*</b> | <b>1,329.69</b> |
| Employee Expenses                           | -               | -                | 856.51          |
| A&G Expenses                                |                 |                  | 255.00          |
| R&M Expenses                                |                 |                  | 218.17          |

\* MSETCL has considered a value of Rs. 2,181.59 Crore in the table 66 of its Petition whereas Rs. 2,214.93 Crore is considered in the text of the Petition.

- 6.2.3 MSETCL's submissions on the components of the overall O&M expenses and the Commission's analysis are detailed below.

### 6.3 Employee Expenses

#### *MSETCL's Submission*

- 6.3.1 DA has increased in FY 2017-18 over FY 2016-17 by Rs. 17.93 Crore on account of regular upward revision in the rate of DA, which in turn has resulted in increase in salaries of staff. DA is a component of salary and is computed on the basic salary. The weighted average DA rate for FY 2017-18 was 136.25% as against 131.25% in FY 2016-17, 119% in FY 2015-16 and 105.92% for FY 2014-15. Summary of the applicable DA rates for the period of FY 2010-11, FY 2011-12, FY 2012-13, FY 2013-14, FY 2014-15, FY 2015-16, FY 2016-17 and FY 2017-18 are submitted.
- 6.3.2 MSETCL has an obligation towards gratuity and a defined benefit retirement plan covering eligible employees. The Plan provides a lump sum payment to vested employees at retirement, death while in employment or on termination of employment of an amount equivalent to 15 days' salary for each year of service subject to a maximum of 20 months' salary or the provisions of the Payment of Gratuity (Amendment) Act, 1997, whichever is more beneficial. Vesting occurs after five years of service. As per Accounting Standard 15, the provision for gratuity is made based on the Actuarial Valuation. The calculation is made on the projected benefit obligation which has been used on unit credit method. Actuarial gains and losses are recognised in the Profit and Loss account based on valuation made as at the year end. The amount of Gratuity amounts to Rs. 39.16 Crore as per provisional unaudited figures for FY 2017-18.
- 6.3.3 The leave encashment is payable to employees as per the Company scheme. The whole Privilege Leave (PL)/ half average pay (HP) leave to the credit of employees can be encashed at the time of superannuation / final settlement of their accounts. Encashment of leave is done only on the applicable PL/HP salary. Provisioning for leave encashment has increased in FY 2017-18 over FY 2016-17, being carried out based on the Actuarial and, moreover, there is an increase in expense for provision for leave encashment. An amount of Rs. 12.34 Crore has been arrived at as per provisional unaudited figures for FY 2017-18.
- 6.3.4 The provisional unaudited gross employee expenses for FY 2017-18 are as shown in the following Table.

**Table 94: Employee Expenses for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars             | FY 2017-18 |                 |
|-------------------------|------------|-----------------|
|                         | MYT Order  | MSETCL Petition |
| Basic Salary            | N.A.       | 266.59          |
| Dearness Allowance (DA) |            | 363.29          |
| House Rent Allowance    |            | 33.46           |

| Particulars   | FY 2017-18 |                 |
|---|------------|-----------------|
|   | MYT Order  | MSETCL Petition |
| Earned Leave Encashment   |            | 12.34           |
| Other Allowances  |            | 83.43           |
| Medical Reimbursement   |            | 0.20            |
| Overtime Payment  |            | 34.29           |
| Bonus/Ex-Gratia Payments  |            | 13.89           |
| Staff welfare expenses  |            | 9.79            |
| Payment under Workmen's Compensation Act                                |            | -               |
| Provident Fund Contribution   |            | 74.84           |
| Pension Payments  |            | 0.10            |
| Gratuity Payment  |            | 39.16           |
| Leave Encashment on Retirement  |            | -               |
| <b>Gross Employee Expenses</b>  |            | <b>931.44</b>   |
| Less: Expenses Capitalised  |            | 61.14           |
| <b>Net Employee Expenses</b>  |            | <b>870.30</b>   |
| Less: SLDC Employee Expense   |            | 13.79           |
| <b>Net Employee Expense after adjustment for SLDC Employee Expense</b>  |            | <b>856.51</b>   |
| Add: Prior Period Employee Expense                                      |            | -               |
| <b>Net Employee Expense after adjustment for SLDC and other Expense</b> |            | <b>856.51</b>   |

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

6.3.5 The Commission has examined the submissions of MSETCL. As sought, MSETCL has provided the unaudited actuals for employee cost for the FY 2017-18 since the year is over and the same have been scrutinized.

6.3.6 The estimated DA, gratuity payment and leave encashment on retirement have increased in FY 2017-18 over FY 2016-17, for the reasons cited by MSETCL at paras. 6.3.1 to 6.3.3. The Commission accepts MSETCL's submission, and provisionally approves these elements accordingly.

6.3.7 The employee expenses provisionally approved for FY 2017-18 are as shown in the Table below.

**Table 95: Employee Expenses for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars  | MTR<br>Petition | Approved in<br>this Order |
|--|-----------------|---------------------------|
| Gross Employee Expenses  | 931.44          | 931.44                    |
| Less: Expenses Capitalised   | 61.14           | 61.14                     |
| <b>Net Employee Expenses</b>   | <b>870.30</b>   | <b>870.30</b>             |
| Less: SLDC Employee Expense  | 13.79           | 13.79                     |
| <b>Net Employee Expense after adjustment<br/>for SLDC Employee Expense</b> | <b>856.51</b>   | <b>856.51</b>             |
| Add: Prior Period Employee Expense   | -               | -                         |
| <b>Total Employee Expense</b>  | <b>856.51</b>   | <b>856.51</b>             |

6.3.8 The Commission approves Employee Expenses of Rs. 856.51 Crore on provisional Truing-up of ARR for FY 2017-18.

#### 6.4 Administrative and General Expenses

##### *MSETCL's Submission*

6.4.1 The asset base has been increasing since the past few years, impacting various heads of A&G Expenses like electricity charges, vehicle running and hiring expenses, security expenses and other A&G expenses. The Table below captures the A&G expenses for FY 2017-18 arrived at based on provisional (unaudited) financial figures for FY 2017-18.

**Table 96: A&G Expenses for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars  | FY 2017-18   |                    |
|--|--------------|--------------------|
|  | MYT<br>Order | MSETCL<br>Petition |
| Gross A&G Expenses   | N.A.         | 276.39             |
| Less: Expenses Capitalised   |              | 13.73              |
| <b>Net A&amp;G Expenses</b>  |              | <b>262.66</b>      |
| Less: MSLDC A&G Expense  |              | 7.66               |
| <b>Net A&amp;G Expense after adjustment for MSLDC A&amp;G<br/>Expense</b>          |              | <b>255.00</b>      |
| Prior period expense: Administration and Other Expenses                            |              | -                  |
| <b>Net A&amp;G expense after considering administration and<br/>other expenses</b> |              | <b>255.00</b>      |

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

6.4.2 The Commission has examined the submissions of MSETCL. As sought, MSETCL has provided the unaudited actuals for A&G expenses for the FY 2017-18 since the year is over, which have been scrutinized.

6.4.3 The Commission provisionally approves the A&G expenses as shown in the Table below.

**Table 97: A&G Expenses for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars  | MTR<br>Petition | Approved in<br>this Order |
|--|-----------------|---------------------------|
| Gross A&G Expenses   | 276.39          | 276.39                    |
| Less: Expenses Capitalised   | 13.73           | 13.73                     |
| <b>Net A&amp;G Expenses</b>  | <b>262.66</b>   | <b>262.66</b>             |
| Less: SLDC A & G Expense   | 7.66            | 7.66                      |
| <b>Net A &amp; G Expense after adjustment for<br/>SLDC A &amp; G Expense</b> | <b>255.00</b>   | <b>255.00</b>             |
| Add: Prior Period A&G Expenses   | -               | -                         |
| <b>Total A&amp;G expense</b>   | <b>255.00</b>   | <b>255.00</b>             |

6.4.4 The Commission approves A&G expenses of Rs. 255.00 Crore on Provisional Truing-up of ARR for FY 2017-18.

### **6.5 Repairs and Maintenance Expenses**

#### ***MSETCL's Submission***

6.5.1 The Table below captures the R&M expenses for FY 2017-18 as per the provisional (unaudited) financial figures for FY 2017-18.

**Table 98: R&M Expenses for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars   | FY 2017-18   |                    |
|---|--------------|--------------------|
|   | MYT<br>Order | MSETCL<br>Petition |
| Plant & Machinery, Building, Civil Works,<br>Hydraulic Works, Lines & Cables Networks | N.A.         | 221.14             |
| Vehicles  |              | 0.55               |
| Furniture & Fixtures  |              | 0.04               |
| Office Equipment  |              | 0.82               |
| <b>Gross R&amp;M Expenses</b>   |              | <b>222.55</b>      |
| Less: Expenses Capitalised  |              | 2.69               |
| <b>Net R&amp;M Expenses</b>   |              | <b>219.86</b>      |
| Less: SLDC R&M Expense  |              | 1.69               |

| Particulars  | FY 2017-18 |                 |
|--|------------|-----------------|
|  | MYT Order  | MSETCL Petition |
| <b>Net R&amp;M Expense after adjustment for SLDC R&amp;M Expense</b> |            | <b>218.17</b>   |
| Prior Period R&M expenses  |            | -               |
| <b>Net R&amp;M Expenses (after adjustments)</b>                      |            | <b>218.17</b>   |

\* There is a mismatch in the figures considered in the table 70 of the Petition and that considered in the financial model format 2.5. The correct figures as per the format 2.5 of the financial model are reproduced here.

### Commission's Analysis and Ruling

6.5.2 The Commission has examined the submissions of MSETCL. As sought, MSETCL has provided the unaudited actuals for R&M expenses for the FY 2017-18 since the year is over, which have been scrutinized.

6.5.3 The Commission provisionally approves the R&M expenses as shown in the Table below.

**Table 99: R&M Expenses for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars  | MTR Petition  | Approved in this Order |
|--|---------------|------------------------|
| Gross R&M Expenses   | 222.55        | 222.55                 |
| Less: Expenses Capitalised   | 2.69          | 2.69                   |
| <b>Net R&amp;M Expenses</b>  | <b>219.86</b> | <b>219.86</b>          |
| Less: SLDC R&M Expense   | 1.69          | 1.69                   |
| <b>Net R&amp;M Expense after adjustment for SLDC R&amp;M Expense</b> | <b>218.17</b> | <b>218.17</b>          |
| Add: Prior Period R&M expenses                                       | -             | -                      |
| <b>Net R&amp;M Expenses</b>  | <b>218.17</b> | <b>218.17</b>          |

6.5.4 The Commission approves R&M Expenses of Rs. 218.17 Crore on Provisional Truing-up of ARR for FY 2017-18.

### 6.6 Total O&M Expenses

6.6.1 MSETCL has computed both the revised normative O&M expenses as well as unaudited actual O&M expenditure for FY 2017-18, and has sought approval for the latter. MSETCL's actual O&M expenses for FY 2015-16 and FY 2016-17 as well as unaudited actuals for FY 2017-18 are lower than the normative O&M expenses for the respective years. Moreover, MSETCL has itself sought the unaudited actuals O&M expenses rather than those computed on the normative basis. Accordingly, the Commission approves the unaudited actual O&M expenditure for FY 2017-18 as sought by MSETCL, after prudence check. In case the actual O&M expenses are

found to be higher at the time of Truing-up, they shall be considered subject to prudence check but without carrying cost on the difference. The O&M expenses approved for FY 2017-18 are as per the following Table.

**Table 100: O&M Expenses for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars                              | MYT Order | MTR Petition    | Approved in this Order |
|--|-----------|-----------------|------------------------|
| Normative O&M Expenses                   | 1,542.51  | 2,214.93        | 1,881.20               |
| <b>Unaudited Actual O&amp;M Expenses</b> |           |                 |                        |
| Employee Expense                         | 1,542.51  | 856.51          | 856.51                 |
| A&G Expense                              |           | 255.00          | 255.00                 |
| R&M Expense                              |           | 218.17          | 218.17                 |
| <b>Total Actual O&amp;M Expenses</b>     |           | <b>1,329.69</b> | <b>1,329.69</b>        |

6.6.2 The Commission has determined the revised normative O&M expenses for FY 2017-18 as Rs. 1,881.20 Crore. The Commission has also approved the total O&M Expenses (under the heads of Employee, A&G and R&M expenses) of Rs. 1,329.69 Crore on Provisional Truing-up of ARR for FY 2017-18, which is considered as a part of ARR.

## 6.7 Capital Expenditure and Capitalisation

### *MSETCL's Submission*

6.7.1 Capitalisation of Rs. 1,083.97 Crore was approved in the MYT Order in Case No. 31 of 2016. The Capitalisation proposed in this Petition is as per the following Table.

**Table 101: Capitalisation for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | MYT Order       | MSETCL Petition |
|-----------------------------|-----------------|-----------------|
| DPR Capitalisation          | 923.04          | 1,296.19        |
| Non-DPR Capitalisation      | 160.92          | 79.76           |
| <b>Total Capitalisation</b> | <b>1,083.97</b> | <b>1,375.95</b> |

### *Commission's Analysis and Ruling*

6.7.2 The Commission has elaborated the analysis underlying its approval of the capitalisation for FY 2015-16 to FY 2019-20 in the paras 4.7.3 to 4.7.21 of this Order. Accordingly, the capitalisation for FY 2017-18 approved by the Commission after prudence check is given in the Table below:



**Table 102: Capitalisation for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order | MTR Petition    | Approved in this Order |
|--|-----------|-----------------|------------------------|
| DPR Capitalisation   | 1,083.97  | 1,296.19        | 1,140.35               |
| Non-DPR Capitalisation   |           | 79.76           | 79.76                  |
| Add: Past period disallowed capitalisation approved in FY 2017-18* |           | -               | 16.09                  |
| <b>Total Approved Capitalisation</b>                               |           | <b>1,375.95</b> | <b>1,236.20</b>        |

\* Part of the disallowed capitalisation claimed by MSETCL in the past years (FY 2010-11 to FY 2014-15) are considered for approval in FY 2017-18 by the Commission.

**6.7.3 The Commission approves Capitalisation of Rs. 1,236.20 Crore on provisional Truing-up of ARR for FY 2017-18. This includes capitalisation of Rs. 16.09 Crore approved now towards previously disallowed schemes for past years (FY 2010-11 to FY 2014-15) based on the put to use of assets in FY 2017-18.**

## 6.8 Depreciation

### *MSETCL's Submission*

6.8.1 Depreciation for FY 2017-18 is computed at the rates provided in the MYT Regulations, 2015. MSETCL has computed the average asset retirement percentage for the year based on the average retired assets as a percentage of the opening GFA of the previous 5 years FY 2012-13 to FY 2016-17. This rate has been applied on the opening GFA of FY 2017-18 to arrive at the amount of retired assets for the year. Depreciation has been calculated at the average rate of 3.96%, which has been calculated by taking the weighted average rate of depreciation of the previous year (i.e. 3.89%) on the opening GFA net of retired assets in the year and 5.28% on the capitalisation added during FY 2017-18. The depreciation sought to be approved is as per the following Table.

**Table 103: Depreciation for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars  | MYT Order | MSETCL Petition |
|--------------|-----------|-----------------|
| Depreciation | 982.17    | 999.10          |

### *Commission's Analysis and Ruling*

6.8.2 For computing depreciation, the Commission has considered the closing GFA of FY 2016-17 approved in this Order as the opening GFA for FY 2017-18. Further, addition in assets in FY 2017-18 is considered as per the capitalisation approved for FY 2017-18 in this Order.

6.8.3 The Commission has computed the rate of depreciation of 3.95% considering the methodology employed by MSETCL as elaborated in para. 6.8.1; on the approved

values of opening GFA and addition to capitalisation for FY 2017-18, in line with the approach in the MYT Order in Case No. 31 of 2016. The Commission has also considered the retirement of assets during the year as submitted by MSETCL and also deducted the grants received as submitted by MSETCL, to arrive at the closing balance of assets.

- 6.8.4 The depreciation approved by the Commission for FY 2017-18 is summarised in the following Table.

**Table 104: Depreciation for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars                                    | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Opening GFA                                    | 23,522.37     | 24,593.45     | 24,194.65              |
| Add: Additional Capitalization during the year | 1,083.97      | 1,375.95      | 1,236.20               |
| Less: Retirement/Adjustments                   | 57.10         | 1.05          | 1.05                   |
| Less: Grants                                   | -             | 101.84        | 101.84                 |
| Closing GFA                                    | 24,549.23     | 25,866.51     | 25,327.97              |
| Average Depreciation Rate                      | 4.09%         | 3.96%         | 3.95%                  |
| <b>Total Depreciation</b>                      | <b>982.17</b> | <b>999.10</b> | <b>978.79</b>          |

- 6.8.5 The Commission approves depreciation of Rs. 978.79 Crore on provisional Truing-up of ARR for FY 2017-18.

## 6.9 Interest on Long Term Loans

### *MSETCL's Submission*

- 6.9.1 The interest on long term loans is computed as per Regulation 29 of the MYT Regulations, 2015.
- 6.9.2 The opening balance of normative loan for FY 2017-18, has been considered as equal to the closing loan balance of FY 2016-17 calculated after taking into account the impact of capitalization claimed against the disallowed capitalization for FY 2010-11 to 2014-15. MSETCL has considered the funding of the capital expenditure requirement through a weighted average debt-equity ratio of 79.37:20.63.
- 6.9.3 With regard to retirement of assets, in the books of accounts assets not in use includes 10% residual value of assets for which 90% depreciation has already been charged. Hence, the same is considered as retirement of assets during the years. Further, where assets have been considered for scrapping, that is also considered for retirement of the assets. The total retirement of assets arrived as per provisional unaudited figures for FY 2017-18 is Rs. 1.05 Crore.
- 6.9.4 Repayment of normative loan is considered as equal to the total of the depreciation.

- 6.9.5 The weighted average interest rate considered is lower than that approved in the MYT Order in Case No. 31 of 2016. This rate has been applied on the average of opening balance and closing balance of loans for the year to compute the interest expense on the normative long term loans. The interest expenses claimed are as per the following Table.

**Table 105: Interest on Long Term Loans for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | MYT Order | MSETCL Petition |
|-----------------------------|-----------|-----------------|
| Interest on Long Term Loans | 784.75    | 858.79          |

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

- 6.9.6 The Commission has considered the opening balance of loan for FY 2017-18 the same as the closing balance of loan for FY 2016-17 approved in this Order, and a weighted average debt-equity ratio of 79.31:20.69 for capitalisation of FY 2017-18 to determine the normative addition in loans during the year.
- 6.9.7 The Commission has considered the repayment of normative loan equal to the depreciation approved for FY 2017-18 in this Order. The reduction of loans due to retirement of assets is considered as submitted by MSETCL, after scrutiny.
- 6.9.8 In line with the Regulation 29.5 of the MYT Regulations, 2015, the weighted average interest rate on the actual loan portfolio at the beginning of the year is to be considered for computing the interest expenses. The Commission sought the computation of the weighted average interest rate from MSETCL. Vide response to data gaps, MSETCL has submitted the weighted average rate of interest on the actual loan portfolio during the year FY 2017-18 at 10.28%. Considering that the financial year is over and the weighted average interest rate during the year reflects the actual interest rate prevalent during the year, the Commission has applied the weighted average rate of interest submitted by MSETCL to the average of opening and closing balance of normative loans for the year, for computing the interest expenses for FY 2017-18. This is also in line with the approach to be taken at the time of final Truing up for FY 2017-18 in line with the Regulations.
- 6.9.9 Accordingly, the Commission approves the interest expense for FY 2017-18 as given in the Table below.

**Table 106: Interest on Long Term Loans for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Opening Balance of Net Normative Loan  | 7,384.97      | 8,358.87      | 8,078.34               |
| Retirement of Assets   | 57.10         | 1.05          | 1.05                   |
| Debt % considered for reduction in loan due to retirement/adjustment of assets | 80.00%        | 80.00%        | 80.00%                 |
| Less: Reduction of Normative Loan due to retirement or replacement of assets   | 45.68         | 0.84          | 0.84                   |
| Less: Grants   | -             | 101.84        | 80.77                  |
| Total Capitalization   | 1,083.97      | 1,375.95      | 1,236.20               |
| Debt Component   | 79.14%        | 79.37%        | 79.31%                 |
| Addition of Normative Loan due to capitalisation                               | 857.84        | 1,092.03      | 980.40                 |
| Repayment of Normative loan during the year                                    | 982.17        | 999.10        | 978.79                 |
| Closing Balance of Net Normative Loan  | 7,214.96      | 8,349.12      | 7,998.35               |
| Weighted average Rate of Interest on actual Loans (%)                          | 10.75%        | 10.28%        | 10.28%                 |
| <b>Interest Expenses</b>   | <b>784.75</b> | <b>858.79</b> | <b>826.34</b>          |

**6.9.10 The Commission approves Interest on Long Term Loans of Rs. 826.34 Crore on provisional Truing-up of ARR for FY 2017-18.**

## **6.10 Other Interest and Finance Charges**

### ***MSETCL's Submission***

6.10.1 Provisional unaudited other interest and finance charges of Rs. 0.27 Crore are sought to be approved, as compared to Rs. 5.46 Crore approved in the MYT Order.

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

6.10.2 The Commission has examined MSETCL's submission and approves the interest and finance charges claimed by MSETCL.

**Table 107: Other Interest and Finance Charges for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars                        | MYT Order | MTR Petition | Approved in this Order |
|------------------------------------|-----------|--------------|------------------------|
| Other interest and finance charges | 5.46      | 0.27         | 0.27                   |

**6.10.3 The Commission approves Other Interest and Finance Charges of Rs. 0.27 Crore on Provisional Truing-up of ARR for FY 2017-18, as claimed by MSETCL.**

## 6.11 Interest on Working Capital

### *MSETCL's Submission*

- 6.11.1 As per Regulation 31.2 of the MYT Regulations, 2015, IoWC has been computed based on the norms and the estimated elements of ARR like O&M expenses, Gross Fixed Assets and revenue from Transmission Charges.
- 6.11.2 The MYT Regulations, 2015 stipulate that the rate of IoWC be equal to weighted average Base Rate prevailing during the concerned year plus 1.5%. MSETCL has considered weighted average of applicable Base Rate till 30 November, 2017 and current One Year MCLR for the remaining period of FY 2017-18 which works to 8.70% plus 1.5% which gives an applicable rate of 10.20% which has been considered for determining IoWC. MSETCL has considered estimated IoWC for the purpose of Provisional Truing up of FY 2017-18. However, MSETCL has sought the provisional (unaudited) IoWC for FY 2017-18 to be approved. The details of the Interest on Working Capital as approved by the Commission in the MYT Order in Case No. 31 of 2016 and as claimed by MSETCL in this Petition for FY 2017-18 is shown in the following Table:

**Table 108: Interest on Working Capital for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars                              | MYT Order | MSETCL Petition |
|--|-----------|-----------------|
| Interest on Working Capital              | 58.06     | 18.68           |
| Interest on Working Capital as per norms | -         | 81.00           |

### *Commission's Analysis and Ruling*

- 6.11.3 The Commission has computed the normative IoWC considering the following:

- Provisional O&M expenses approved based on the unaudited actual figures for FY 2017-18.
- The opening GFA approved in this Order for FY 2017-18.
- Transmission Charges levied on TSUs as per the InSTS Tariff Order in Case No. 91 of 2016 for April, 2017 to March, 2018 at Rs. 291.59 Crore per month, i.e. a total revenue of Rs. 3,499.03 Crore in FY 2017-18.

- 6.11.4 The interest rate for computing IoWC is considered as per Regulation 31.2 (c) of the MYT Regulations, 2015, which is the weighted average of the SBI Base rate till 28 November, 2017 and thereafter, one year MCLR as on 29 November, 2017 which works out to 8.70% plus 150 basis points, as per the first amendment to MYT Regulations 2015. Thus, the interest rate of 10.20% (8.70% + 1.50% = 10.20%) has

been considered for estimation of the IoWC. The Commission has applied this rate to compute the normative IoWC.

6.11.5 MSETCL has computed both the normative IoWC and the unaudited actual IoWC for FY 2017-18 however, claimed the unaudited actual to be approved for provisional Truing up. The Commission has computed the normative IoWC and also examined the unaudited actual IoWC as sought by MSETCL. The Commission has, however, considered the unaudited actual IoWC as a part of ARR for FY 2017-18, as sought by MSETCL. MSETCL has further sought that, in case the IoWC is actually higher, the shortfall may be allowed at the time of Truing-up. The Commission shall consider the actual IoWC at the time of Truing-up, but no carrying cost would be allowed on the differential between the actual IoWC and the revised normative IoWC computed at the time of True up.

6.11.6 The normative and unaudited actual IoWC as approved by the Commission for FY 2017-18 is shown in the Table below:

**Table 109: Interest on Working Capital for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars   | MYT Order    | MTR Petition | Approved in this Order |
|---|--------------|--------------|------------------------|
| Operations and Maintenance Expenses for one month   |              | 110.81       | 110.81                 |
| Maintenance Spares @1% of the Opening GFA   |              | 245.93       | 241.95                 |
| One and a half months of the expected revenue from transmission charges at the prevailing tariffs |              | 437.38       | 437.38                 |
| Less: Amount of Security Deposit from Transmission System Users                                   |              | -            | -                      |
| <b>Total Working Capital Requirement</b>  |              | 794.12       | 790.13                 |
| Interest Rate (%)   |              | 10.20%       | 10.20%                 |
| <b>Normative Interest on Working Capital</b>  | <b>58.06</b> | <b>81.00</b> | <b>80.56</b>           |
| <b>Unaudited Actual Interest on Working Capital</b>   | <b>-</b>     | <b>18.68</b> | <b>18.68</b>           |

6.11.7 The Commission has determined the normative Interest on Working Capital as **Rs. 80.56 Crore**. The Commission has also approved however, the unaudited actual Interest on Working Capital of **Rs. 18.68 Crore** which is considered in the ARR, on provisional Truing-up of ARR for FY 2017-18.

## 6.12 Return on Equity

### *MSETCL's Submission*

6.12.1 The RoE for FY 2017-18 is computed in accordance with the Regulation 28 of the MYT Regulations, 2015. Regulatory equity at the beginning of the year has been considered same as regulatory equity at the end of the FY 2016-17 calculated after taking into account the impact of capitalization claimed against the disallowed capitalization for FY 2010-11 to 2014-15. Further 20.63% of the capitalisation has been considered for addition in equity during the year based on the weighted average

debt-equity ratio of 79.37:20.63 for FY 2017-18. Reduction in equity due to retirement of assets in FY 2017-18 has been considered as 20% of actual retirement of assets/adjustments. As per direction of the Holding Company, MSETCL has considered RoE of 7.5% against the rate of 15.5% specified in the MYT Regulations, 2015. However, MSETCL sought that in case of shortfall in ARR, it may review the decision on reduction in RoE from the rate of 15.5% as permitted under the MYT Regulations, 2015, at the time of True up. The RoE claimed by MSETCL is as shown in the following Table:

**Table 110: Return on Equity for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars      | MYT Order | MSETCL Petition |
|------------------|-----------|-----------------|
| Return on Equity | 428.93    | 443.49          |

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

- 6.12.2 As per the principle for RoE computation specified in the MYT Regulations, 2015, the Commission considered the closing balance of regulatory equity for FY 2016-17 approved in this Order, as the opening balance of equity for FY 2017-18. Addition in equity due to approved capitalisation in FY 2017-18 is considered at the weighted average debt-equity ratio of 79.31-20.69 computed by the Commission.
- 6.12.3 The Commission has considered retirement of assets as submitted by MSETCL, and reduced equity to the extent of 20% of the value of retired assets.
- 6.12.4 The Commission has computed RoE at the rate of 7.5% in line with the stand taken in the MYT Order in Case No. 31 of 2016 and as sought by MSETCL in the present Petition. Any subsequent change in MSETCL's stand may be dealt with appropriately by the Commission at the time of Truing-up, but no carrying cost on any impact on this account shall be allowed. RoE as approved by the Commission for FY 2017-18 is set out in the Table below.



**Table 111: Return on Equity for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order     | MTR Petition  | Approved in this Order |
|--|---------------|---------------|------------------------|
| Regulatory Equity at the beginning of the year                               | 5,611.17      | 5,822.26      | 5,744.81               |
| Capitalisation during the year   | 1,083.97      | 1,375.95      | 1,236.20               |
| Consumer Contribution and Grants used during the year for Capitalisation     | -             | 101.84        | 21.07                  |
| Equity portion of capitalisation during the year                             | 226.12        | 283.92        | 255.80                 |
| Reduction in Equity Capital on account of retirement / replacement of assets | 11.42         | 0.21          | 0.21                   |
| Regulatory Equity at the end of the year                                     | 5,825.87      | 6,004.13      | 5,979.34               |
| <b>RoE %</b>   | <b>7.50%</b>  | <b>7.50%</b>  | <b>7.50%</b>           |
| Return on Regulatory Equity at the beginning of the year                     | 420.88        | 436.67        | 430.86                 |
| Return on Equity portion of capitalisation during the year                   | 8.05          | 6.82          | 8.79                   |
| <b>Total Return on Regulatory Equity</b>                                     | <b>428.93</b> | <b>443.49</b> | <b>439.66</b>          |

**6.12.5 The Commission approves Return on Equity of Rs. 439.66 Crore on Provisional Truing-up of ARR for FY 2017-18.**

**6.13 Income Tax**

***MSETCL's Submission***

6.13.1 Income Tax is claimed as a part of ARR for FY 2017-18 In accordance with MERC (MYT) Regulations, 2015. Current Tax has been paid as per the provisions of the Income Tax Act, 1961 in respect of Taxable Income for the year, after considering permissible tax exemption, reduction/disallowance. As against the approved Income Tax of Rs. 116.38 Crore, the estimated Income Tax amounts to Rs. 157.05 Crore. Further, the payment of Income Tax is carried out quarterly, on the basis of the anticipated revenue from Tariff, Non-Tariff Income and income from other sources as the actual revenue gets finalised after the finalisation of the Annual Accounts. Accordingly, Income tax based on estimate for FY 2017-18 is sought to be approved as shown in the following Table:

**Table 112: Income Tax for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars | MYT Order | MSETCL Petition |
|-------------|-----------|-----------------|
| Income Tax  | 116.38    | 157.05          |

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

6.13.2 Under the MYT Regulations, the Commission may provisionally approve Income Tax payable for each year of the Control Period considering the actual Income Tax payable as per the latest Audited Accounts. The Income Tax as per the latest available Audited Accounts is for FY 2016-17 which is approved as Nil in this Order, in



accordance with the MYT Regulations, 2015. Accordingly, the Commission has considered Nil Income Tax liability for FY 2017-18, subject to True up.

6.13.3 Accordingly, the Income Tax expense approved for FY 2017-18 is as given in the Table below.

**Table 113: Income Tax for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars | MYT Order | MTR Petition | Approved in this Order |
|-------------|-----------|--------------|------------------------|
| Income Tax  | 116.38    | 157.05       | -                      |

6.13.4 The Commission approves Nil Income Tax Expenses on Provisional Truing-up of ARR for FY 2017-18.

#### 6.14 Contribution towards Contingency Reserves

##### *MSETCL's Submission*

6.14.1 Contribution towards Contingency Reserves is made in accordance with Regulation 34 of the MYT Regulations, 2015. MSETCL has ensured that the accumulated Contingency Reserves do not exceed 5% of the original cost of fixed assets and are invested in approved securities. Accordingly, the contribution towards Contingency Reserves sought to be approved is shown in the Table below.

**Table 114: Contribution towards Contingency Reserves for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars                               | MYT Order | MSETCL Petition |
|---|-----------|-----------------|
| Contribution towards Contingency Reserves | 58.81     | 61.48           |

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

6.14.2 The Commission has verified that the accumulated Contingency Reserves do not exceed 5% of the original cost of fixed assets as stipulated in the MYT Regulations, 2015, and accordingly considered the contribution as 0.25% of opening GFA of FY 2017-18 approved in this Order. Further, MSETCL has stated that it has invested the contribution towards Contingency Reserves pertaining to FY 2016-17 in the approved securities in FY 2017-18. Accordingly, as discussed in para 5.14.4 of this Order the Commission has considered the contribution towards Contingency Reserves for FY 2016-17 as as submitted by MSETCL (presuming this amount would be invested in FY 2017-18) and approved it for inclusion in the ARR for FY 2017-18. The contribution towards Contingency Reserves approved for FY 2017-18, subject to True up based on documentary evidence and Audited Accounts, is as shown in the Table below.

**Table 115: Contribution towards Contingency Reserves for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars                          | MYT Order | MTR Petition | Approved in this Order |
|--------------------------------------|-----------|--------------|------------------------|
| Contribution to Contingency Reserves | 58.81     | 61.48        | 117.76                 |

6.14.3 The Commission approves contribution to Contingency Reserves of Rs. 117.76 Crore on provisional Truing-up of ARR for FY 2017-18. This includes Contingency Reserves for FY 2016-17 of Rs. 57.27 Crore for FY 2016-17 and Rs. 60.49 Crore for FY 2017-18.

#### 6.15 Revenue from Transmission Charges, Income from Wheeling Charges and Point of Connection Charges

##### *MSETCL's Submission*

6.15.1 Revenue from Transmission Tariff is computed at Rs. 3,499.03 Crore as per the InSTS Order in Case No. 91 of 2016, applicable from April, 2017 to March, 2018.

6.15.2 MSETCL also earns revenue for wheeling Central Sector power to Goa and Dadra & Nagar Haveli and from other Generators which is to be considered in Provisional Truing-up. This has increased in FY 2017-18 owing to wheeling charges from the additional users of the Transmission network.

6.15.3 MSETCL has considered the Income from PoC Charges of Inter State Transmission Lines in accordance with CERC Order Nos. 256/TT/2013 and 173/TT/2016 dated 18 May, 2015 and 19 December, 2017, respectively, however, these are subject to final adjustment with PGCIL with respect to the PoC charges as applicable in line with the CERC Orders. Accordingly, MSETCL has considered income from PoC Charges of Rs. 97.68 Crore.

6.15.4 The following is the revenue from Transmission Tariff and other sources:

**Table 116: Revenue from Transmission Charges and other sources for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars  | MYT Order | MSETCL Petition |
|--|-----------|-----------------|
| Revenue from Transmission Tariff   | -         | 3,499.03        |
| Revenue from Wheeling Charges from Goa, Dadra & Nagar Haveli and other sources | 61.91     | 164.96          |
| PoC Charges for Inter-State Lines  | 178.55    | 97.68           |

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

6.15.5 The Commission has taken the approved revenue as per the InSTS Tariff Order as the revenue recovered from Transmission Charges; income from Wheeling power to Dadra & Nagar Haveli and PoC Charges for wheeling Central Sector power through Inter-State Lines to Goa, as submitted by MSETCL. Any variation in actual would be dealt with during Truing-up for FY 2017-18. Accordingly, the revenue from Transmission Charges and other sources as approved is given in the Table below:

**Table 117: Revenue from Transmission Charges and other sources for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars   | MYT Order | MTR Petition | Approved in this Order |
|---|-----------|--------------|------------------------|
| Revenue from Transmission Charges   | 3,499.03  | 3,499.03     | 3,499.03               |
| Income from Wheeling Charges from Goa, Dadra and Nagar Haveli and other sources | 61.91     | 164.96       | 164.96                 |
| Income from PoC charges for Inter-State lines                                   | 178.55    | 97.68        | 97.68                  |

6.15.6 The Commission approves revenue from Transmission Tariff as Rs. 3,499.03 Crore, income from Dadra & Nagar Haveli and other sources towards Wheeling Charges as Rs. 164.96 Crore and PoC Charges for wheeling Central Sector power to Goa through Inter-State Lines as Rs. 97.68 Crore on Provisional Truing-up of ARR for FY 2017-18.

### **6.16 Non-Tariff Income**

#### ***MSETCL's Submission***

6.16.1 The Non-Tariff Income includes the interest earned on Contingency Reserves and other investments, revenue from open access charges, excess provision written back, other miscellaneous income, etc. The Non-Tariff Income has been deducted from the ARR.

6.16.2 The Non-Tariff Income is as shown in the following Table.

**Table 118: Non-Tariff Income for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars       | MYT Order | MSETCL Petition |
|-------------------|-----------|-----------------|
| Non-Tariff Income | 237.56    | 178.58          |

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

6.16.3 The Commission has examined the submission of MSETCL and accordingly approved the Non-Tariff Income for FY 2017-18. as per the following Table.

**Table 119: Non-Tariff Income for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars       | MYT Order | MTR Petition | Approved in this Order |
|-------------------|-----------|--------------|------------------------|
| Non-Tariff Income | 237.56    | 178.58       | 178.58                 |

**6.16.4 The Commission approves Non-Tariff Income of Rs. 178.58 Crore on Provisional Truing-up of ARR for FY 2017-18.**

## **6.17 Summary of Provisional Truing-up of ARR for FY 2017-18**

### ***MSETCL's Submission***

6.17.1 The following Table summarises the provisional Truing-up of ARR for FY 2017-18:

**Table 120: Summary of provisional Truing-up of ARR for FY 2017-18, as submitted by MSETCL (Rs. Crore)**

| Particulars  | Order in Case No. 31 of 2016 | Normative | FY 2017-18 (Provisional) |
|--|------------------------------|-----------|--------------------------|
| Operation & Maintenance Expenses   | 1,542.51                     | *2,214.93 | 1,329.69                 |
| Depreciation Expenses  | 982.17                       |           | 999.10                   |
| Interest on Loan Capital   | 784.75                       |           | 858.79                   |
| Other Interest and Finance Charges   | 5.46                         |           | 0.27                     |
| Interest on Working Capital  | 58.06                        | 81.00     | 18.68                    |
| Income Tax   | 116.38                       |           | 157.05                   |
| Contribution to contingency reserves   | 58.81                        |           | 61.48                    |
| <b>Total Revenue Expenditure</b>   | <b>3,548.13</b>              |           | <b>3,425.06</b>          |
| Add: Return on Equity Capital  | 428.93                       |           | 443.49                   |
| <b>Aggregate Revenue Requirement</b>   | <b>3,977.06</b>              |           | <b>3,868.55</b>          |
| Less: Non-Tariff Income  | 237.56                       |           | 178.58                   |
| Less: Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 61.91                        |           | 164.96                   |
| Less: Income from PoC charges for Inter-State lines                                      | 178.55                       |           | 97.68                    |
| <b>Aggregate Revenue Requirement from Transmission</b>                                   | <b>3,499.03</b>              |           | <b>3,427.32</b>          |
| Revenue from Transmission Tariff   | -                            |           | <b>3,499.03</b>          |
| Revenue Gap/(Surplus) for current year   | -                            |           | (71.71)                  |
| Revenue Gap/(Surplus) till previous year   | -                            |           | 1,096.93                 |
| <b>Cumulative Revenue Gap/(Surplus)</b>  | <b>-</b>                     |           | <b>1,025.22</b>          |

| Particulars   | Order in Case No. 31 of 2016 | Normative | FY 2017-18 (Provisional) |
|---------------|------------------------------|-----------|--------------------------|
| till the year |                              |           |                          |

\* MSETCL has mentioned Rs. 2,181.59 Crore in the table 83 of the Petition however, it is considered as Rs. 2,214.93 Crore in the financial model.

### Commission's Analysis and Ruling

6.17.2 Based on the approvals discussed in the earlier paragraphs, the summary of the provisional Truing-up for FY 2017-18 is given in the following Table.

**Table 121: Summary of provisional Truing-up of ARR for FY 2017-18 approved by Commission (Rs. Crore)**

| Particulars  | MYT Order       | MTR Petition    | Approved in this Order |
|--|-----------------|-----------------|------------------------|
| Operation & Maintenance Expenses   | 1,542.51        | 1,329.69        | 1,329.69               |
| Depreciation Expenses  | 982.17          | 999.10          | 978.79                 |
| Interest on Loan Capital   | 784.75          | 858.79          | 826.34                 |
| Other Interest and Finance Charges   | 5.46            | 0.27            | 0.27                   |
| Interest on Working Capital  | 58.06           | 18.68           | 18.68                  |
| Income Tax   | 116.38          | 157.05          | -                      |
| Contribution to contingency reserves   | 58.81           | 61.48           | 117.76                 |
| <b>Total Revenue Expenditure</b>   | <b>3,548.13</b> | <b>3,425.06</b> | <b>3,271.53</b>        |
| Add: Return on Equity Capital  | 428.93          | 443.49          | 439.66                 |
| <b>Aggregate Revenue Requirement</b>   | <b>3,977.06</b> | <b>3,868.55</b> | <b>3,711.18</b>        |
| Less: Non Tariff Income  | 237.56          | 178.58          | 178.58                 |
| Less: Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 61.91           | 164.96          | 164.96                 |
| Less: Income from PoC charges for Inter-State lines                                      | 178.55          | 97.68           | 97.68                  |
| <b>Aggregate Revenue Requirement from Transmission</b>                                   | <b>3,499.03</b> | <b>3,427.32</b> | <b>3,269.96</b>        |
| Revenue from Transmission Tariff   | -               | 3,499.03        | 3,499.03               |
| <b>Revenue Gap/(Surplus) for current year</b>  | <b>-</b>        | <b>(71.71)</b>  | <b>(229.07)</b>        |
| Revenue Gap/(Surplus) till previous year   | -               | 1,096.93        | (164.15)               |
| <b>Cumulative Revenue Gap/(Surplus) till the year</b>                                    | <b>-</b>        | <b>1,025.22</b> | <b>(393.22)</b>        |

6.17.3 The detailed analysis underlying the Commission's approval of individual ARR elements on provisional Truing up of ARR for FY 2017-18 is already set out above, however, the variation in the ARR sought by the MSETCL and that approved by the Commission in this Order is mainly on account of lower approval of capitalisation which impacts the depreciation, Interest on Long Term Loans and RoE approved by the Commission. Moreover, the Income Tax liability for FY 2017-18 is Nil as computed in line with the MYT Regulations, 2015. Further, the contribution to Contingency Reserves for FY 2016-17 is allowed in FY 2017-18 based on MSETCL's submission that they have been invested in the approved securities in FY 2017-18.

**6.17.4 The Commission approves a cumulative Revenue Surplus of Rs. 393.22 Crore on Provisional Truing-up of ARR for FY 2017-18, to be adjusted in the ARR for FY 2018-19. This includes the cumulative Revenue Surplus determined by the Commission on Truing-up for FY 2015-16 and FY 2016-17.**

## 7 REVISED ESTIMATES OF ARR FOR FY 2018-19 AND FY 2019-20

### 7.1 Background

7.1.1 MSETCL has computed the revised estimates of ARR for FY 2018-19 and FY 2019-20 under the MYT Regulations, 2015. The analysis underlying the Commission's approval is set out below.

### 7.2 Operation & Maintenance Expenses

#### *MSETCL's Submission*

7.2.1 The norms for O&M expenditure stipulated for MSETCL in the MYT Regulations, 2015 are substantially lower than the norms for the other two Transmission Licensees, viz. Reliance Infrastructure Ltd. (R-Infra-T) and Tata Power Co. (TPC-T).

7.2.2 The computation of normative O&M expenses for FY 2018-19 and FY 2019-20 is based on the number of Bays and Ckt. Km. The projection of Bays and Ckt. Km. is as per the following Table.

**Table 122: Projection of Ckt. Km. and number of Bays for FY 2018-19 and FY 2019-20**

| Particulars                                | FY<br>2018-19 | FY<br>2019-20 |
|--|---------------|---------------|
| <b>Transmission Line Length (Ckt. Km.)</b> |               |               |
| HVDC                                       | 1,504         | 1,504         |
| 765 kV                                     | -             | -             |
| 400 kV                                     | 8,415         | 8,415         |
| >66 kV and <400 kV                         | 35,733        | 35,733        |
| 66 kV and less                             | 3,279         | 3,279         |
| <b>Total No. of Bays</b>                   |               |               |
| 765 kV                                     | 9             | 9             |
| 400 kV                                     | 527           | 527           |
| >66 kV and <400 kV                         | 6,654         | 6,654         |
| 66 kV and less                             | 8,656         | 8,656         |

*Note - There is a mismatch in the details of Bays and Ckt. Km. considered in the above table and that considered in the financial model. The above Table is reproduced as per MSETCL's Petition.*

7.2.3 MSETCL has also projected the O&M expenses for FY 2018-19 over FY 2017-18 on escalation basis as per the following Table:

**Table 123: Computation of O&M Expense increase from FY 2017-18 to FY 2018-19**

| Particulars                              | FY<br>2017-18 | FY<br>2018-19   |
|--|---------------|-----------------|
| Employee Expenses                        | 856.51        | 856.51          |
| Add: Yearly increment 10%                |               | 85.65           |
| Add: Wage Revision and new employees 20% |               | 188.43          |
| <b>Total Employee Expenses</b>           |               | <b>1,130.60</b> |
| A&G Expenses                             | 255.00        | 255.00          |
| Add: Yearly increment 5%                 |               | 12.75           |
| <b>Total A&amp;G Expenses</b>            |               | <b>267.75</b>   |
| R&M Expenses                             | 218.17        | 218.17          |
| Add: Yearly increment 5%                 |               | 10.91           |
| <b>Total R&amp;M Expenses</b>            |               | <b>229.08</b>   |
| <b>Total O&amp;M Expenses</b>            |               | <b>1,627.43</b> |

7.2.4 The O&M expenses of Rs. 1,627.43 Crore derived as per the above stated methodology for FY 2018-19 are escalated by 5% to derive the O&M expenses for FY 2019-20 which work out to Rs. 1,708.80 Crore.

7.2.5 MSETCL has projected the O&M expenditure as the minimum of the normative O&M expenses (based on Bays and Ckt. Km.) and their actual increment with year-on-year escalation.

7.2.6 The projected O&M expenses are lower than the normative. However, if the actual O&M expenses turn out to be higher, the shortfall may be allowed at the time of Truing-up. The Table below projects the O&M expenditure for FY 2018-19 and FY 2019-20.

**Table 124: O&M Expenses for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particular                   | FY<br>2018-19 | FY<br>2019-20 |
|------------------------------|---------------|---------------|
| Total O&M Expenses-Petition  | 1,627.43      | 1,708.80      |
| Total O&M Expenses-Normative | 2,437.72      | 2,714.35      |

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

7.2.7 As discussed in earlier Sections of this Order, the actual O&M expenses in the Audited Accounts for FY 2015-16 as well as FY 2016-17 and the unaudited actual expenses for FY 2017-18 are lower than the respective normative O&M expenses. Hence, approving the projections of the O&M expenses for FY 2018-19 and FY 2019-20 on a normative basis may result in significant over-recovery of O&M expenses and a higher Tax liability for MSETCL.



7.2.8 The Commission has therefore decided, to approve the O&M expenses as per the methodology proposed by MSETCL. However, the Commission has observed that MSETCL has considered an escalation of 20% pertaining to wage revision and new employees without providing any information regarding the break-up of these two elements separately. The Commission in the past Orders also, has taken a stand that the impact of wage revision will be passed on only after it actually happens, subject to prudence check. Further, considering that the O&M norms determined for MSETCL were based on the past cost trends, and hence reflect the expenditure undertaken by MSETCL in the normal course of business, would also include the impact of wage revisions undertaken in the past. Accordingly, these norms would generally factor in such cost increases as well to some extent. The Commission has, therefore, not considered the escalation factor pertaining to wage revision while computing the O&M expenses for FY 2018-19 and FY 2019-20. Moreover, the Commission, in the past Orders in Case Nos. 31 of 2016 and 207 of 2014 has allowed the actual impact of wage revision without sharing of efficiency gains/ losses on True up, considering it to be an uncontrollable parameter. Accordingly, if actual O&M expenses turn out be higher, they may be considered, subject to prudence check, at the time of Truing-up. The Commission would also undertake the sharing of gain / (loss) at that time, but not allow any carrying cost on that account. In view of the above, the O&M expenses for FY 2017-18 approved in this Order are escalated at the rates submitted by MSETCL after excluding the escalation factor pertaining to the wage revision to derive the expenses for FY 2018-19, and the O&M expenses for the subsequent year FY 2019-20 have been computed similarly.

7.2.9 The O&M expenses approved by the Commission for FY 2018-19 and FY 2019-20 are as per the following Table.

**Table 125: O&M Expenses for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars                   | FY 2018-19 |              |                        | FY 2019-20 |              |                        |
|-------------------------------|------------|--------------|------------------------|------------|--------------|------------------------|
|                               | MYT Order  | MTR Petition | Approved in this Order | MYT Order  | MTR Petition | Approved in this Order |
| <b>Total O&amp;M Expenses</b> | 1619.63    | 1627.43      | 1,439.00               | 1,700.61   | 1,708.80     | 1,510.95               |

7.2.10 The Commission approves the revised estimates of O&M Expenses of Rs. 1,439.00 Crore for FY 2018-19 and Rs. 1,510.95 Crore for FY 2019-20.

### 7.3 Capital Expenditure and Capitalisation

#### *MSETCL's Submission*

7.3.1 The Capitalisation of assets for FY 2018-19 and 2019-20 projected for approval is as per the following Table.

**Table 126: Capitalisation for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars            | FY 2018-19      |                 | FY 2019-20      |                 |
|------------------------|-----------------|-----------------|-----------------|-----------------|
|                        | Capex           | Capitalisation  | Capex           | Capitalisation  |
| DPR Capitalisation     |                 | 1,001.82        |                 | 1,236.83        |
| Non-DPR Capitalisation |                 | 198.37          |                 | 34.80           |
| <b>Total Claimed</b>   | <b>1,085.33</b> | <b>1,200.19</b> | <b>1,009.65</b> | <b>1,271.63</b> |

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

7.3.2 The Commission has elaborated the analysis underlying its approval of the capitalisation for FY 2015-16 to FY 2019-20 in the paras 4.7.3 to 4.7.21 of this Order. Accordingly, the capitalisation for FY 2018-19 and FY 2019-20 approved by the Commission after prudence check is given in the Table below.

**Table 127: Capitalisation for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars   | FY 2018-19    |                 |                        | FY 2019-20    |                 |                        |
|---|---------------|-----------------|------------------------|---------------|-----------------|------------------------|
|   | MYT Order     | MTR Petition    | Approved in this Order | MYT Order     | MTR Petition    | Approved in this Order |
| DPR Capitalisation  |               | 1,001.82        | 920.04                 |               | 1,236.83        | 1,360.00               |
| Non-DPR Capitalisation  |               | 198.37          | 184.01                 |               | 34.80           | 34.80                  |
| Add: Past period disallowed capitalisation approved in FY 2018-19 and FY 2019-20* |               | -               | -                      |               | -               | 5.67                   |
| <b>Total Approved Capitalisation</b>  | <b>672.63</b> | <b>1,200.19</b> | <b>1,104.05</b>        | <b>827.68</b> | <b>1,271.63</b> | <b>1,400.47</b>        |

\* Part of the disallowed capitalisation claimed by MSETCL in the past years (FY 2010-11 to FY 2014-15) are considered for approval in FY 2019-20 by the Commission.

7.3.3 The Commission has allowed the capitalisation for the DPR schemes in the year in which the assets are expected to be put to use and hence, certain capitalisation claimed by MSETCL in past years (FY 2015-16 to FY 2018-19) has been allowed in the FY 2019-20. On account of the same, the capitalisation approved for FY 2019-20 is higher than that proposed by MSETCL.

7.3.4 **The Commission approves revised estimates of Capitalisation of Rs. 1,104.05 Crore for FY 2018-19, which does not include any past period disallowed capitalisation and of Rs. 1,400.47 Crore for FY 2019-20 which includes past period disallowed capitalisation of Rs. 5.67 Crore towards assets expected to be put to use in FY 2019-20.**

## 7.4 Depreciation

### *MSETCL's Submission*

7.4.1 The depreciation for FY 2018-19 and FY 2019-20 is computed as per the rates specified in the MYT Regulations, 2015. Average asset retirement percentage for the year is based on the average retired assets as percentage of the opening GFA of the five years from FY 2012-13 to FY 2016-17. This rate is applied on the opening GFA of FY 2018-19 and FY 2019-20 to arrive at the amount of retired assets for the respective years. Depreciation has been calculated considering the weighted average rate of depreciation of the previous year on the opening GFA net of assets retired in the year, and 5.28% on capitalisation added during the respective years. Accordingly, the depreciation rate computed is 4.02% for FY 2018-19 and 4.07% for FY 2019-20. The depreciation sought for FY 2018-19 and FY 2019-20 is as per the following Table.

**Table 128: Depreciation for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars  | FY 2018-19 | FY 2019-20 |
|--------------|------------|------------|
| Depreciation | 1,062.50   | 1,125.91   |

### *Commission's Analysis and Ruling*

7.4.2 For computing Depreciation, the Commission has considered the closing GFA of FY 2017-18 approved in this Order as the opening GFA for FY 2018-19. Addition of assets in FY 2018-19 is considered as per the capitalisation approved in this Order. Similarly, the closing GFA for FY 2018-19 so derived is considered as the opening GFA for FY 2019-20. Addition to assets for FY 2019-20 is considered as per the capitalisation approved in this Order.

7.4.3 The Commission has computed the rate of depreciation of 4.01% and 4.07% for FY 2018-19 and FY 2019-20 respectively, considering the methodology employed by MSETCL as elaborated in para. 7.4.1; on the approved values of opening GFA and addition to capitalisation for FY 2018-19 and similarly for FY 2019-20, in line with the approach in the MYT Order in Case No. 31 of 2016. The Commission has also considered the retirement of assets during the year as submitted by MSETCL and also deducted the grants received as submitted by MSETCL, to arrive at the closing balance of assets.

7.4.4 The Depreciation approved by the Commission for FY 2018-19 and FY 2019-20 is summarised in the following Table.

**Table 129: Depreciation for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars                                    | FY 2018-19      |                 |                        | FY 2019-20      |                 |                        |
|--|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|
|  | MYT Order       | MTR Petition    | Approved in this Order | MYT Order       | MTR Petition    | Approved in this Order |
| Opening GFA                                    | 24,549.23       | 25,866.51       | 25,327.97              | 25,162.26       | 27,023.64       | 26,389.02              |
| Add: Additional Capitalization during the year | 672.63          | 1,200.19        | 1,104.05               | 827.68          | 1,271.63        | 1,400.47               |
| Less: Retirement/Adjustments                   | 59.60           | 41.24           | 41.18                  | 61.09           | 43.06           | 42.85                  |
| Closing GFA                                    | 25,162.26       | 27,023.64       | 26,389.02              | 25,928.85       | 28,252.21       | 27,746.64              |
| Average Depreciation Rate                      | 4.12%           | 4.02%           | 4.01%                  | 4.16%           | 4.07%           | 4.07%                  |
| <b>Total Depreciation</b>                      | <b>1,023.60</b> | <b>1,062.50</b> | <b>1,036.10</b>        | <b>1,061.49</b> | <b>1,125.91</b> | <b>1,101.46</b>        |

**7.4.5 The Commission approves the revised estimates of depreciation of Rs. 1,036.10 Crore for FY 2018-19 and Rs. 1,101.46 Crore for FY 2019-20.**

## **7.5 Interest on Long Term Loans**

### ***MSETCL's Submission***

7.5.1 The Interest on Long Term Loans is computed as per Regulation 29 of the MYT Regulations, 2015. The capital expenditure is funded through loans from LIC, JICA, IFC, PFC, Union Bank of India, Bank of Baroda and Oriental Bank of Commerce. Loan addition has been considered at the weighted average debt-equity ratio of 78.58:21.42 and 76.27:23.73 for the years FY 2018-19 and FY 2019-20 respectively, on the proposed capitalisation during the year.

7.5.2 The rate of 10.28% is considered instead of 10.75% (weighted average interest taking the actual loan portfolio during the FY 2017-18) considering the rate applicable on 31 March, 2018. In case of any actual shortfall, Interest on Long Term Loans may be allowed as per the MYT Regulations, 2015. The interest expenses proposed are as per the following Table.

**Table 130: Interest on Long Term Loans for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars                 | FY 2018-19 | FY 2019-20 |
|-----------------------------|------------|------------|
| Interest on Long Term Loans | 850.36     | 832.65     |

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

7.5.3 The Commission has considered the closing loan balance for FY 2017-18 approved in this Order as the opening balance for FY 2018-19. The Commission has computed the weighted average debt-equity ratio of 78.58:21.42 for FY 2018-19 and 76.27:23.73 for FY 2019-20 for deriving the debt component of the approved capitalisation added during the respective years for approving the Interest on Long Term Loans. Similarly, the equity component of the respective years is considered for deriving the equity component of the approved capitalisation added during the respective years.

7.5.4 The Commission has considered the repayment of loan equal to the approved depreciation for respective years.

7.5.5 The reduction in loan is computed by multiplying the value of retired assets considered in this Order with the percentage debt funding, considered as 80% since the assets being retired would historically have been funded at 80% debt. This would be finalised based on the Audited Annual Accounts at the time of Truing-up.

7.5.6 The weighted average rate of interest on the loan portfolio during FY 2017-18, as submitted by MSETCL, is 10.28%. The Commission has taken this interest rate for FY 2018-19 and FY 2019-20 and applied it to the average of opening and closing balance of loan for the year to compute the interest expense on normative long term loans. Any variation in the interest rate shall be dealt with at the time of Truing-up. In case the actual interest rates are higher, no carrying cost shall be allowed on any under-recovery in the Interest on Long Term Loans.

7.5.7 The Interest on Long Terms Loans approved by the Commission is as per the following Table.

**Table 131: Interest on Long Term Loans for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars  | FY 2018-19    |               |                        | FY 2019-20    |               |                        |
|--|---------------|---------------|------------------------|---------------|---------------|------------------------|
|  | MYT Order     | MTR Petition  | Approved in this Order | MYT Order     | MTR Petition  | Approved in this Order |
| Opening Balance of Net Normative Loan  | 7,214.96      | 8,349.12      | 7,998.35               | 6,671.52      | 8,194.89      | 7,795.41               |
| Retirement of Assets   | 59.60         | 41.24         | 41.18                  | 61.09         | 43.06         | 42.85                  |
| Debt % considered for reduction in loan due to retirement/adjustment of assets | 80.00%        | 80.00%        | 80.00%                 | 80.00%        | 80.00%        | 80.00%                 |
| Less: Reduction of Normative Loan due to retirement or replacement of assets   | 47.68         | 32.99         | 32.94                  | 48.87         | 34.45         | 34.28                  |
| Total Capitalization   | 672.63        | 1,200.19      | 1,104.05               | 827.68        | 1,271.63      | 1,400.47               |
| Debt Component   | 78.47%        | 78.58%        | 78.58%                 | 78.49%        | 76.27%        | 76.27%                 |
| Addition of Normative Loan due to capitalisation during the year               | 527.84        | 943.07        | 867.53                 | 649.65        | 969.92        | 1,068.19               |
| Repayment of Normative loan during the year                                    | 1,023.60      | 1,062.50      | 1,036.10               | 1,061.49      | 1,125.91      | 1,101.46               |
| Closing Balance of Net Normative Loan  | 6,671.52      | 8,194.89      | 7,795.41               | 6,210.81      | 8,004.45      | 7,727.85               |
| Weighted average Rate of Interest on actual Loans (%)                          | 10.75%        | 10.28%        | 10.28%                 | 10.75%        | 10.28%        | 10.28%                 |
| <b>Interest Expenses</b>   | <b>746.40</b> | <b>850.36</b> | <b>811.80</b>          | <b>692.43</b> | <b>832.65</b> | <b>797.90</b>          |

7.5.8 The Commission approves the revised estimates of Interest on Long Term Loans of Rs. 811.80 Crore FY 2018-19 and Rs. 797.90 Crore for FY 2019-20.

## 7.6 Other Interest and Finance Charges

### *MSETCL's Submission*

7.6.1 The other interest and finance charges for FY 2018-19 and FY 2019-20 have been arrived at based on the average of these expenses of FY 2015-16, FY 2016-17 and FY 2017-18, as per the following Table.

**Table 132: Other Interest and Finance Charges for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars                        | FY 2018-19 | FY 2019-20 |
|------------------------------------|------------|------------|
| Other Interest and Finance Charges | 2.59       | 2.59       |

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

7.6.2 The Commission has examined and accepted the Other Interest and Finance Charges as proposed by MSETCL, as shown in the following Table.

**Table 133: Other Interest and Finance Charges for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars                        | FY 2018-19 |              |                        | FY 2019-20 |              |                        |
|------------------------------------|------------|--------------|------------------------|------------|--------------|------------------------|
|                                    | MYT Order  | MTR Petition | Approved in this Order | MYT Order  | MTR Petition | Approved in this Order |
| Other interest and finance charges | 5.46       | 2.59         | 2.59                   | 5.46       | 2.59         | 2.59                   |

7.6.3 The Commission approves the revised estimates of other Interest and Finance Charges of Rs. 2.59 Crore each for FY 2018-19 and FY 2019-20.

### **7.7 Interest on Working Capital**

#### ***MSETCL's Submission***

7.7.1 As per Regulation 31.2 of the MYT Regulations, 2015, the IoWC has been computed based on the norms and the estimated elements of ARR like O&M expenses, Gross Fixed Assets and revenue from Transmission Charges. The Regulations stipulate that the rate of IoWC shall be the SBI Base Rate prevailing during the year of filing the Petition plus 150 basis points. In line with the First Amendment to the MYT Regulations, 2015, pursuant to which the definition of the Base Rate is modified to include one-year Marginal Cost of Funds based Lending Rate (MCLR) as declared by SBI, MSETCL has considered the MCLR of 8.15% plus 1.5% i.e. 9.65% as the applicable interest rate for computation of IoWC for FY 2018-19 and FY 2019-20. However, in view of optimal working capital management, MSETCL has claimed estimated IoWC instead of the normative for FY 2018-19 and FY 2019-20.

7.7.2 The Table below indicates the IoWC calculated based on norms and based on the estimates of MSETCL for FY 2018-19 and FY 2019-20.

**Table 134: Interest on Working Capital for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars                                     | FY 2018-19 | FY 2019-20 |
|---|------------|------------|
| Interest on Working Capital estimated by MSETCL | 10.00      | 10.00      |

| Particulars                              | FY<br>2018-19 | FY<br>2019-20 |
|--|---------------|---------------|
| Interest on Working Capital as per norms | 83.18         | 86.96         |

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

7.7.3 MSETCL has computed the normative IoWC for FY 2018-19 and FY 2019-20 in line with MYT Regulations, 2015, but has applied the IoWC estimated for these years.

7.7.4 The actual IoWC for FY 2015-16 and FY 2016-17 is substantially lower than that approved in the MYT Order on a normative basis and the revised normative value computed in this Order. The IoWC estimated by MSETCL for FY 2017-18 is also substantially lower than that approved in the MYT Order. Accordingly, as stated by MSETCL, the IoWC is lower than the normative levels on account of optimal working capital management. Therefore, the Commission accepts MSETCL's proposal to consider the estimated IoWC for FY 2018-19 and FY 2019-20. However, any variation in the IoWC at the time of Truing-up shall be considered without any carrying cost.

7.7.5 Accordingly, the IoWC approved by the Commission is as shown in the Table below.

**Table 135: Interest on Working Capital for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars   | FY 2018-19   |              |                        | FY 2019-20   |              |                        |
|---|--------------|--------------|------------------------|--------------|--------------|------------------------|
|   | MYT Order    | MTR Petition | Approved in this Order | MYT Order    | MTR Petition | Approved in this Order |
| Operations and Maintenance Expenses for one month   |              | 135.62       | 119.92                 |              | 142.40       | 125.91                 |
| Maintenance Spares @1% of the Opening GFA   |              | 258.67       | 253.28                 |              | 270.24       | 263.89                 |
| One and a half months of the expected revenue from transmission charges at the prevailing tariffs |              | 467.71       | 358.30                 |              | 488.51       | 440.68                 |
| Less: Amount of Security Deposit from Transmission System Users                                   |              | -            | -                      |              | -            | -                      |
| <b>Total Working Capital Requirement</b>  |              | 861.99       | 731.50                 |              | 901.14       | 830.49                 |
| Interest Rate (%)   |              | 9.65%        | 9.45%                  |              | 9.65%        | 9.45%                  |
| <b>Normative Interest on Working Capital</b>  | <b>58.06</b> | <b>83.18</b> | <b>69.13</b>           | <b>58.06</b> | <b>86.96</b> | <b>78.48</b>           |
| <b>Estimated Interest on Working Capital</b>  | <b>-</b>     | <b>10.00</b> | <b>10.00</b>           | <b>-</b>     | <b>10.00</b> | <b>10.00</b>           |

7.7.6 The Commission has computed the revised estimates of normative Interest on Working Capital of Rs. 69.13 Crore for FY 2018-19 and Rs. 78.48 Crore for FY 2019-20. The Commission has however, approved the estimated IoWC of Rs. 10.00 Crore each for FY 2018-19 and FY 2019-20 as claimed by MSETCL, as a part of ARR for these years, respectively.

### **7.8 Contribution to Contingency Reserves**

#### ***MSETCL's Submission***

7.8.1 The contribution to Contingency Reserves is computed at 0.25% of the opening GFA as provided in Regulation 34 of the MYT Regulations, 2015:



**Table 136: Contribution to Contingency Reserves for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars  | FY 2018-19 | FY 2019-20 |
|--|------------|------------|
| Contribution to Contingency Reserves during the year | 64.67      | 67.56      |

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

- 7.8.2 The Commission has verified that the accumulated Contingency Reserves of MSETCL do not exceed 5% of the original cost of fixed assets as stipulated in Regulation 34.1 of the MYT Regulations, 2015.
- 7.8.3 The Commission has considered contribution to Contingency Reserves at 0.25% of the opening GFA in accordance with the Regulations and based on the capitalisation approved in this Order. Accordingly, the approved contribution to Contingency Reserves is as given in the Table below.

**Table 137: Contribution to Contingency Reserves for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars                          | FY 2018-19 |              |                        | FY 2019-20 |              |                        |
|--------------------------------------|------------|--------------|------------------------|------------|--------------|------------------------|
|                                      | MYT Order  | MTR Petition | Approved in this Order | MYT Order  | MTR Petition | Approved in this Order |
| Contribution to Contingency Reserves | 61.37      | 64.67        | 63.32                  | 62.91      | 67.56        | 65.97                  |

- 7.8.4 **The Commission approves the revised estimates of contribution to Contingency Reserves of Rs. 63.32 Crore for FY 2018-19 and Rs. 65.97 Crore for FY 2019-20.**

## **7.9 Return on Equity**

### ***MSETCL's Submission***

- 7.9.1 MSETCL has estimated the Return on Equity for FY 2018-19 and FY 2019-20 in accordance with the Regulation 28 of the MERC (MYT) Regulations, 2015. Regulatory equity at the beginning of FY 2018-19 and FY 2019-20 has been considered same as the closing balance of regulatory equity of respective previous year after taking into account the impact of capitalization claimed against the disallowed capitalization for FY 2010-11 to 2014-15. The addition to equity is considered at the weighted average debt-equity ratio of 78.58-21.42 and 76.27-23.73 for FY 2018-19 and FY 2019-20, respectively. Reduction in equity due to retirement / adjustments of assets in FY 2018-19 and FY 2019-20 has been considered as 20% of estimated retirement of assets / adjustments.
- 7.9.2 MSETCL has considered return on equity at a rate of 7.5% for FY 2018-19 and FY 2019-20 in line with direction of the Holding Company and MSETCL's Board Resolution dated 23 November, 2017. A copy of the Board Resolution and the



direction of the Holding Company have been submitted in the Petition. The RoE claimed for FY 2018-19 and FY 2019-20 is as per the following Table.

**Table 138: Return on Equity for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars                                    | FY<br>2018-19 | FY<br>2019-20 |
|--|---------------|---------------|
| Return on Regulatory Equity claimed            | 459.57        | 473.83        |
| Return on Regulatory Equity as per Regulations | 949.79        | 991.64        |

7.9.3 MSETCL sought that in case of shortfall in ARR, it may review the decision on reduction in RoE from the rate of 15.5% as permitted under the MYT Regulations, 2015, at the time of True up.

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

7.9.4 The Commission has considered the regulatory equity at the end of FY 2017-18, as approved in this Order, as the opening balance for FY 2018-19. The approved closing balance of equity for FY 2018-19 in this Order is considered as the opening balance for FY 2019-20.

7.9.5 The addition in the equity balance for the respective years is considered at a weighted average debt:equity rate of 78.58:21.42 and 76.27:23.73 for FY 2018-19 and FY 2019-20 respectively, as computed by the Commission. The reduction of equity balance pertaining to retired assets projected for the respective years is considered at 20% since the assets being retired would have been funded in the past at 20% equity.

7.9.6 MSETCL has claimed RoE at a reduced rate of 7.5% for FY 2018-19 and FY 2019-20. In the light of the above, the Commission, vide data gaps, had asked MSETCL for detailed justification for a lower rate of RoE, and to address its queries regarding its impact on financial stability and creditworthiness. MSETCL's responses are discussed below.

- Funding of shortfall due to lower RoE to maintain financial health:

The following cash flow projections are submitted by MSETCL.

**Table 139: Cash flow projections for FY 2017-18 to FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars             | FY<br>2017-18 | FY<br>2018-19 | FY<br>2019-20 |
|-------------------------|---------------|---------------|---------------|
| <b>Cash Inflow</b>      |               |               |               |
| <b>ARR*</b>             | 3,648.82      | 3,981.07      | 4,116.72      |
| <b>RoE %</b>            | 7.50%         | 7.50%         | 7.50%         |
| <b>Return on Equity</b> | <b>441.21</b> | <b>455.09</b> | <b>475.03</b> |

| Particulars                             | FY<br>2017-18 | FY<br>2018-19 | FY<br>2019-20 |
|---|---------------|---------------|---------------|
| <b>Cash Outflow</b>                     |               |               |               |
| Capex                                   | 1,251.58      | 1,648.66      | 598.35        |
| Equity %                                | 20.58%        | 21.65%        | 23.72%        |
| Equity Contribution                     | 257.57        | 356.93        | 141.93        |
| CSR Expenses                            | -             | 35.00         | 54.00         |
| Investment towards Contingency Reserves | 61.46         | 60.00         | 66.57         |
| <b>Total Cash Outflow</b>               | <b>319.03</b> | <b>451.93</b> | <b>262.50</b> |
| <b>Cash Surplus</b>                     | <b>122.18</b> | <b>3.16</b>   | <b>212.53</b> |

*Note- This table is submitted vide response to data gaps on 19 January, 2018 subsequent to which the revised Petition was filed on 11 June, 2018 which has revised ARR numbers.*

- MSETCL stated that, it has a special reserve of Rs. 139.39 Crore as on 31 March, 2017 which shall be allowed to be used in case of shortfall.
- The shortfall in the investment for Contingency Reserve in FY 2018-19 will be made in FY 2019-20 from the surplus cash.
- **Readiness of Banks/FIs to fund the debt requirement of capex schemes in future** - REC has already conveyed its approval for the new schemes of Rs. 3,271.25 Crore and further schemes to be sanctioned during FY 2017-18 at a concessional rate of 10.75% with a rebate of 85 basis points. A loan agreement of Rs. 300 Crore is executed with Bank of India on 9 August, 2017 with an interest rate of 8.93% p.a. with yearly reset. MSETCL has also invited offers for long term loan of Rs. 1000 Crore through tender and offers have been received from various banks and financial institutions with the interest rate being in the range of 8-8.5%, which are under finalisation.
- **Impact on creditworthiness** - MSETCL's creditworthiness will not be adversely affected by the reduction in RoE as it will not affect its debt servicing capacity because the loan repayment obligation will be taken care of by the depreciation component of the ARR and the interest component is a pass-through in the Tariff. Thus, MSETCL has a comfortable debt service coverage ratio, which is the key concern for any financial institution.
- Considering the RoE proposed for FY 2018-19 and FY 2019-20, MSETCL will have sufficient funds from operations to repay the annual debt, which would be around Rs. 900 - 1000 Crore. MSETCL can also undertake the proposed Capex through the debt and equity funding. Considering this, MSETCL can retain its current CARE 'A' rating. MSETCL has submitted the availability of funds from operation as follows:

**Table 140: Fund availability from operations for FY 2017-18 to FY 2019-20 (Rs. Crore)**

| Particulars                 | FY<br>2017-18   | FY<br>2018-19   | FY<br>2019-20   |
|-----------------------------|-----------------|-----------------|-----------------|
| <b>Cash Inflow</b>          |                 |                 |                 |
| <b>ARR*</b>                 | 3,648.82        | 3,981.07        | 4,116.72        |
| RoE %                       | 7.50%           | 7.50%           | 7.50%           |
| <b>Return on Equity</b>     | <b>441.21</b>   | <b>455.09</b>   | <b>475.03</b>   |
| Depreciation                | 987.91          | 1,043.32        | 1,105.44        |
| <b>Fund from operations</b> | <b>1,429.12</b> | <b>1,498.41</b> | <b>1,580.47</b> |

*Note- This table is submitted vide response to data gaps on 19 January, 2018 subsequent to which the revised Petition was filed on 11 June, 2018 which has revised ARR numbers.*

7.9.7 In response to a query regarding its ability to meet its estimated expenses in the relevant years, MSETCL submitted details of the projected expenses and revenue for FY 2017-18 to FY 2019-20.

7.9.8 The Commission has analysed the projected expenses and income for FY 2018-19 and FY 2019-20 submitted by MSETCL considering the approvals accorded in this Order for the respective expense and income elements. MSETCL has projected a Revenue Surplus for these two years on a stand-alone basis. The Revenue Surpluses from the past years, which reduce the actual recovery from Transmission Tariff for the year, have been considered as these Surpluses are assumed to be available with MSETCL for meeting expenses during the year.

7.9.9 The Commission has reworked the projected cash flow statement submitted by MSETCL, considering the expenses as per MSETCL and the revenue projections based on the ARR approved in this Order for the relevant years. The Commission has also considered the cumulative Revenue Surplus up to FY 2017-18 approved in this Order as being available to meet the projected expenses in FY 2018-19.

**Table 141: Projected expenses and revenue for FY 2017-18 to FY 2019-20(Rs. Crore)**

| Particulars                         | FY<br>2017-18             | FY<br>2018-19             |                          | FY<br>2019-20             |                          |
|-------------------------------------|---------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
|                                     | MSETCL<br>Sub-<br>mission | MSETCL<br>Sub-<br>mission | Commission's<br>Analysis | MSETCL<br>Sub-<br>mission | Commission's<br>Analysis |
| <b>Projected Expenses</b>           |                           |                           |                          |                           |                          |
| Loan Repayment -Existing Loans      | 937.00                    | 915.00                    | 915.00                   | 915.00                    | 915.00                   |
| Loan Repayment -New Loans           |                           |                           |                          |                           |                          |
| Interest Payment - Existing Loans   | 665.00                    | 615.00                    | 615.00                   | 600.00                    | 600.00                   |
| Interest Payment - New Loans        | 40.00                     | 55.00                     | 55.00                    | 30.00                     | 30.00                    |
| Financing and Guarantee Charges     | 3.75                      | 3.75                      | 2.59                     | 3.75                      | 2.59                     |
| O&M Expenses                        | 1462.89                   | 1814.29                   | 1,627.43                 | 1905.01                   | 1,708.80                 |
| Interest on Working Capital         | 22.00                     | 10.00                     | 10.00                    | 10.00                     | 10.00                    |
| Equity infusion for funding capital | 257.57                    | 356.93                    | 356.93                   | 141.93                    | 141.93                   |

| Particulars  | FY<br>2017-18             | FY<br>2018-19             |                          | FY<br>2019-20             |                          |
|--|---------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
|  | MSETCL<br>Sub-<br>mission | MSETCL<br>Sub-<br>mission | Commission's<br>Analysis | MSETCL<br>Sub-<br>mission | Commission's<br>Analysis |
| <b>Projected Expenses</b>  |                           |                           |                          |                           |                          |
| expenditure  |                           |                           |                          |                           |                          |
| Income Tax   | 129.49                    | 97.12                     | 98.07                    | 101.37                    | 102.40                   |
| Contribution to Contingency Reserves   | 61.46                     | 63.77                     | 64.67                    | 66.57                     | 67.56                    |
| <b>Total Expenditure Projected</b>   | <b>3,579.16</b>           | <b>3,930.86</b>           | <b>3,744.69</b>          | <b>3,773.63</b>           | <b>3,578.28</b>          |
| <b>Projected Income</b>  |                           |                           |                          |                           |                          |
| ARR  | 3,978.75                  | 4,334.23                  | 3,147.42                 | 4,495.43                  | 3,655.06                 |
| Non-Tariff Income  | 184.27                    | 202.69                    | 214.08                   | 222.96                    | 235.49                   |
| Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 47.99                     | 52.78                     | 181.46                   | 58.06                     | 199.60                   |
| PoC Charges  | 97.68                     | 97.68                     | 55.62                    | 97.68                     | 5.99                     |
| <b>Past Surplus excluding DPC</b>  | -                         | -                         | 236.17                   | -                         | -                        |
| <b>DPC</b>   | -                         | -                         | -                        | -                         | -                        |
| <b>Total Projected Income</b>  | <b>3,648.82</b>           | <b>3,981.07</b>           | <b>3,834.75</b>          | <b>4,116.72</b>           | <b>4,096.14</b>          |
| <b>Funding Shortfall/(Surplus)</b>   | <b>(69.66)</b>            | <b>(50.21)</b>            | <b>(90.06)</b>           | <b>(343.09)</b>           | <b>(517.86)</b>          |

*Note- 1 This table is submitted vide response to data gaps on 19 January, 2018 subsequent to which the revised Petition was filed on 11 June, 2018 which has revised ARR numbers. The figures considered in the Commission's Analysis for the O&M expenses, financing and guarantee charges, Contingency Reserves and Income Tax are as submitted in the revised Petition by MSETCL.*

*Note - 2 Commission's Analysis is carried out for FY 2018-19 and FY 2019-20 only since FY 2017-18 is over.*

7.9.10 After examining MSETCL's submissions and based on the above analysis, the Commission is of the view that, prima facie, the proposed reduction in rate of RoE in FY 2018-19 and FY 2019-20 may not result in a shortfall in cash flow, debt service coverage ratio or adversely impact its creditworthiness. The Commission notes that MSETCL has projected a Revenue Surplus for both these years considering book expenses and expected income.

7.9.11 Considering the foregoing, in the meantime the Commission has taken a considered decision to approve the RoE for FY 2018-19 and FY 2019-20 at 7.5%, as sought by MSETCL. Any subsequent change in MSETCL's stand may be dealt with appropriately by the Commission at the time of Truing-up, but no carrying cost for any impact on this account shall be allowed.

7.9.12 The RoE approved by the Commission for FY 2018-19 and FY 2019-20 is as per the following Table.

**Table 142: Return on Equity for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars  | FY 2018-19    |               |                        | FY 2019-20    |               |                        |
|--|---------------|---------------|------------------------|---------------|---------------|------------------------|
|  | MYT Order     | MTR Petition  | Approved in this Order | MYT Order     | MTR Petition  | Approved in this Order |
| Regulatory Equity at the beginning of the year                               | 5,959.34      | 6,004.13      | 5,979.34               | 5,959.34      | 6,251.16      | 6,207.23               |
| Capitalisation during the year   | 827.68        | 1,200.19      | 1,104.05               | 827.68        | 1,271.63      | 1,400.47               |
| Consumer Contribution and Grants used during the year for Capitalisation     | -             | 1.82          | 0.39                   | -             | -             | -                      |
| Equity portion of capitalisation during the year                             | 178.02        | 257.12        | 236.52                 | 178.02        | 301.71        | 332.28                 |
| Reduction in Equity Capital on account of retirement / replacement of assets | 12.22         | 8.27          | 8.24                   | 12.22         | 8.63          | 8.57                   |
| Regulatory Equity at the end of the year                                     | 6,125.14      | 6,251.16      | 6,207.23               | 6,125.14      | 6,544.24      | 6,530.94               |
| <b>RoE %</b>   | <b>15.50%</b> | <b>7.50%</b>  | <b>7.50%</b>           | <b>15.50%</b> | <b>7.50%</b>  | <b>7.50%</b>           |
| Return on Regulatory Equity at the beginning of the year                     | 903.10        | 450.31        | 448.45                 | 923.70        | 468.84        | 465.54                 |
| Return on Equity portion of capitalisation during the year                   | 10.30         | 9.26          | 8.55                   | 12.85         | 10.99         | 12.14                  |
| <b>Total Return on Regulatory Equity</b>                                     | <b>913.40</b> | <b>459.57</b> | <b>457.00</b>          | <b>936.55</b> | <b>479.83</b> | <b>477.68</b>          |

**7.9.13 The Commission approves the revised estimates of Return on Equity of Rs. 457.00 Crore for FY 2018-19 and Rs. 477.68 Crore for FY 2019-20.**

## 7.10 Income Tax

### *MSETCL's Submission*

7.10.1 As per Regulation 33 of the MYT Regulations, 2015, the provisional Income Tax payable for each year shall be based on the actual Income Tax paid by MSETCL. It has considered the MAT rate of 21.34% on the RoE for FY 2018-19 and FY 2019-20 for computation of Income Tax. The MAT rate has been applied since MSETCL is covered by MAT for the FY 2018-19 and FY 2019-20. Accordingly, the Income Tax proposed for approval is as per the following Table.

**Table 143: Income Tax for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars | FY 2018-19 | FY 2019-20 |
|-------------|------------|------------|
| Income Tax  | 98.07      | 102.40     |

### *Commission's Analysis and Ruling*

7.10.2 The MYT Regulations, 2015 provide that the Commission may provisionally approve Income Tax payable for each year considering the actual Income Tax payable as per the latest Audited Accounts. Any difference between the actual and approved Income Tax would be allowed for recovery at the time of MTR or Truing-up:

*“33.1 The Commission, in its MYT Order, shall provisionally approve Income Tax payable for each year of the Control Period based on the actual Income Tax paid by the Generating Company or Licensee or MSLDC, in case the Generating Company or Licensee or MSLDC has not engaged in any other*

*regulated or unregulated Business or Other Business, as allowed by the Commission relating to the electricity Business regulated by the Commission, as per latest available Audited Accounts, subject to prudence check:...*

*...33.3 Variation between the Income Tax actually paid or Income Tax on regulatory Profit Before Tax of the regulated Business of Generating Company or Licensee or MSLDC, as applicable, and the Income Tax approved by the Commission for the respective Year after truing-up, shall be allowed for recovery as part of the Aggregate Revenue Requirement at the time of Mid-term Review or Truing-up, subject to prudence check.."*

7.10.3 The Income Tax as per the latest available Audited Accounts is for FY 2016-17 and as approved in this Order is Nil in accordance with the MYT Regulations, 2015. Accordingly, the Commission has considered Nil Income Tax liability for FY 2018-19 and FY 2019-20, subject to True up.

7.10.4 Accordingly, the Income Tax approved by the Commission for FY 2018-19 and FY 2019-20 is as per the following Table.

**Table 144: Income Tax for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars | FY 2018-19 |              |                        | FY 2019-20 |              |                        |
|-------------|------------|--------------|------------------------|------------|--------------|------------------------|
|             | MYT Order  | MTR Petition | Approved in this Order | MYT Order  | MTR Petition | Approved in this Order |
| Income Tax  | 247.82     | 98.07        | -                      | 254.10     | 102.40       | -                      |

7.10.5 The Commission approves Nil Income Tax each for FY 2018-19 and FY 2019-20.

## 7.11 Non-Tariff Income

### *MSETCL's Submission*

7.11.1 MSETCL has computed Non-Tariff Income by considering year on year increase of 10% for Non-Tariff Income components in FY 2017-18 for FY 2018-19 and FY 2019-20. The total Non-Tariff Income as submitted by MSETCL is as per the following Table.

**Table 145: Non-Tariff Income for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars       | FY 2018-19 | FY 2019-20 |
|-------------------|------------|------------|
| Non-Tariff Income | 196.44     | 216.09     |

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

7.11.2 The Commission has examined the submission of MSETCL and accordingly approved the Non-Tariff Income for FY 2018-19 and FY 2019-20 except for the estimation of the loss on Foreign Exchange Rate Variation since movement of the foreign exchange rates cannot be predicted.

7.11.3 The Non-Tariff Income approved by the Commission is as given in the Table below.

**Table 146: Non-Tariff Income for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars       | FY 2018-19 |              |                        | FY 2019-20 |              |                        |
|-------------------|------------|--------------|------------------------|------------|--------------|------------------------|
|                   | MYT Order  | MTR Petition | Approved in this Order | MYT Order  | MTR Petition | Approved in this Order |
| Non-Tariff Income | 245.55     | 196.44       | 214.08                 | 253.96     | 216.09       | 235.49                 |

7.11.4 The Commission approves the revised estimates of Non-Tariff Income of Rs. 214.08 Crore for FY 2018-19 and Rs. 235.49 Crore for FY 2019-20.

### **7.12 Income from Wheeling Charges and Point of Connection Charges**

#### ***MSETCL's Submission***

7.12.1 MSETCL has computed income from wheeling Central Sector power to Goa and Dadra & Nagar Haveli and other sources by considering year on year increase of 10% on such income in FY 2017-18 for FY 2018-19 and FY 2019-20, as shown in the following Table.

**Table 147: Income from Wheeling Charges from Goa, Dadra & Nagar Haveli, and other sources for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars  | FY 2018-19 | FY 2019-20 |
|--|------------|------------|
| Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 181.46     | 199.60     |

7.12.2 MSETCL has considered the Income from PoC Charges of Inter State Transmission Lines in accordance with CERC Order Nos. 256/TT/2013 and 173/TT/2016 dated 18 May, 2015 and 19 December, 2017, respectively. MSETCL has taken into account the Income from PoC Charges of Inter State Transmission Lines including the interest on overdue amount as per the aforementioned CERC Orders, computed considering the interest rate as per the applicable Tariff Regulations (CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations, 2014). However these are subject to final adjustment with PGCIL with respect to the PoC charges as applicable in line with the CERC Orders in this respect. The total amount due for FY 2018-19 is computed at Rs. 55.62 Crore and in the absence of the



interest for FY 2019-20 is computed at Rs. 5.99 Crore, as shown in the following Table.

**Table 148: Income from PoC Charges for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars | FY 2018-19 |                 | FY 2019-20 |                 |
|-------------|------------|-----------------|------------|-----------------|
|             | MYT Order  | MSETCL Petition | MYT Order  | MSETCL Petition |
| PoC Charges | 178.55     | 55.62           | 178.55     | 5.99            |

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

7.12.3 The Commission has considered the income from Wheeling Charges from Goa, Dadra & Nagar Haveli, Goa and other sources as well as income from PoC Charges from Inter-State Transmission Lines for FY 2018-19 and FY 2019-20 as submitted by MSETCL, subject to Truing-up, as shown in the Table below.

**Table 149: Income from Wheeling Charges from Dadra & Nagar Haveli, Goa and other sources and income from PoC Charges for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars   | FY 2018-19 |              |                        | FY 2019-20 |              |                        |
|---|------------|--------------|------------------------|------------|--------------|------------------------|
|   | MYT Order  | MTR Petition | Approved in this Order | MYT Order  | MTR Petition | Approved in this Order |
| Income from Wheeling Charges from Goa, Dadra and Nagar Haveli and other sources | 61.91      | 181.46       | 181.46                 | 61.91      | 199.60       | 199.60                 |
| Income from PoC charges for Inter-State lines                                   | 178.55     | 55.62        | 55.62                  | 178.55     | 5.99         | 5.99                   |

7.12.4 The Commission approves the income from Wheeling Charges from Goa, Dadra & Nagar Haveli, Goa and other sources of Rs. 181.46 Crore for FY 2018-19 and Rs. 199.60 Crore for FY 2019-20. The Commission also approves the income from PoC Charges of Rs. 55.62 Crore for FY 2018-19 and Rs. 5.99 Crore for FY 2019-20.

### **7.13 Carrying Cost/Holding Cost for Trued-up ARR for FY 2015-16 and FY 2016-17 *MSETCL's Submission***

7.13.1 The Carrying Cost for cumulative Revenue Gap till FY 2018-19 (FY 2015-16 to FY 2017-18) is computed by MSETCL as shown in the following Table:



**Table 150: Computation on Carrying cost for Revenue Gap, as submitted by MSETCL (Rs. Crore)**

| Particulars                    | FY 2015-16    | FY 2016-17    | FY 2017-18    |
|--------------------------------|---------------|---------------|---------------|
| Opening balance of Revenue Gap | 743.93        | 743.93        | 2,434.71      |
| Add: Gap during the year       | -             | 1,690.78      | 0             |
| Less: Recovery during the year | 0             | 0             | 0             |
| Closing balance of Revenue Gap | 743.93        | 2,434.71      | 2,434.71      |
| Rate of Interest               | 11.04%        | 10.79%        | 10.20%        |
| <b>Carrying Cost</b>           | <b>41.05</b>  | <b>171.45</b> | <b>124.16</b> |
| <b>Total Carrying Cost</b>     | <b>336.66</b> |               |               |

7.13.2 Further, MSETCL has also sought carrying cost on the impact of disallowed capitalisation as shown in the following Table:

**Table 151: Computation of Carrying Cost on impact of disallowed capitalisation, as submitted by MSETCL (Rs. Crore)**

| Particulars                               | FY 2010-11    | FY 2011-12    | FY 2012-13    | FY 2013-14    | FY 2014-15    | FY 2015-16    | FY 2016-17    | FY 2017-18    |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>Applicable Rate</b>                    | <b>12.26%</b> | <b>14.40%</b> | <b>14.61%</b> | <b>14.58%</b> | <b>14.75%</b> | <b>11.04%</b> | <b>10.79%</b> | <b>10.20%</b> |
| Opening balance                           | 0.00          | 0.82          | 5.97          | 11.38         | 28.00         | 55.50         | 55.50         | 55.50         |
| Additions during year                     | 0.82          | 5.15          | 5.41          | 16.62         | 27.50         | 0.00          | 0.00          | 0.00          |
| <b>Closing balance</b>                    | <b>0.82</b>   | <b>5.97</b>   | <b>11.38</b>  | <b>28.00</b>  | <b>55.50</b>  | <b>55.50</b>  | <b>55.50</b>  | <b>55.50</b>  |
| Carrying cost on opening balance          | 0.00          | 0.12          | 0.87          | 1.66          | 4.13          | 6.13          | 5.99          | 2.83          |
| Carrying cost on addition during the year | 0.05          | 0.37          | 0.40          | 1.21          | 2.03          | 0.00          | 0.00          | 0.00          |
| <b>Total</b>                              | <b>0.05</b>   | <b>0.49</b>   | <b>1.27</b>   | <b>2.87</b>   | <b>6.16</b>   | <b>6.13</b>   | <b>5.99</b>   | <b>2.83</b>   |
| <b>Total Carrying Cost</b>                | <b>25.78</b>  |               |               |               |               |               |               |               |

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

7.13.3 The Commission has computed the carrying/holding cost on the approved Revenue Gap/(Surplus) derived after Truing up of ARR for FY 2015-16 and FY 2016-17. As discussed in paras 4.9.9 and 5.9.9 of this Order, the difference of the interest expenses computed by applying the rates approved in the MYT Order and now is excluded while computing the carrying / holding cost. This differential is computed as shown in the following Table:

**Table 152: Differential Interest expenses for FY 2015-16 and FY 2016-17 excluded from the computation of carrying/holding cost (Rs. Crore)**

| Particulars   | FY<br>2015-16 | FY<br>2016-17 |
|---|---------------|---------------|
| Interest expenses computed in this Order  | 801.40        | 864.85        |
| Interest expenses computed on approved normative loan by applying weighted average interest rate of 10.75% approved in MYT Order in Case No. 31 of 2016 | 772.65        | 845.96        |
| <b>Difference</b>   | <b>28.75</b>  | <b>18.89</b>  |

7.13.4 Accordingly, the effective Revenue Surplus for FY 2015-16 works out to Rs. 468.33 Crore (Surplus of Rs. 439.57 Crore less interest expense difference of Rs. 28.75 Crore).

7.13.5 Further, the cumulative Revenue Surplus upto FY 2015-16 has been restated as elaborated in para 4.19.3. This will impact the cumulative Gap/Surplus at the end of each year from FY 2016-17 to FY 2018-19. Further, the impact of disallowed capitalisation allowed on True up of FY 2014-15 as well as the carrying cost on Revenue Surplus of FY 2014-15 computed upto FY 2016-17, both to be recovered in FY 2016-17, have not been considered either on the expense side or the revenue side by MSETCL. The Commission has accordingly, determined the effective Revenue Gap/(Surplus) on Truing up of FY 2016-17 considering all these parameters. Moreover, the difference of the interest expenses for FY 2016-17 computed above is also excluded while computing this effective Revenue Gap/(Surplus). The effective Revenue Gap computed for FY 2016-17 is as shown in the following Table:

**Table 153: Effective Revenue Gap for FY 2016-17 (Rs. Crore)**

| Particulars  | Effective<br>Revenue Gap<br>for FY 2016-17 |
|--|--|
| Standalone ARR of FY 16-17 on True up (excluding incentive)  | 3,428.44                                   |
| Less: difference of interest expenses computed using interest rate approved in MYT Order and the present Order | 18.89                                      |
| <b>Net Aggregate Revenue Requirement on True up - (A)</b>  | <b>3,409.56</b>                            |
| Revenue from InSTS   | 1,979.51                                   |
| Add: Carrying cost on surplus of FY 2014-15 calculated upto FY 2016-17   | 272.71                                     |
| Less: Impact of disallowed capitalisation  | 8.23                                       |
| Add: Revenue surplus upto 2014-15  | 985.09                                     |
| <b>Total effective revenue recovery in FY 2016-17 - (B)</b>  | <b>3,229.08</b>                            |
| <b>Effective Revenue Gap on True up of FY 2016-17 (A-B)</b>  | <b>180.48</b>                              |

7.13.6 The interest rates considered for computing the IoWC for respective years from FY 2015-16 to FY 2018-19 in this Order are applied for computing the carrying/holding cost.

7.13.7 The Commission observes that MSETCL has also claimed carrying cost on the impact of disallowed capitalisation amounting to Rs. 25.78 Crore along with the carrying cost on True up of FY 2015-16 and FY 2016-17 in its Petition. In the MYT Order in Case No. 39 of 2013, the Mid-Term Performance Review (MTR) Order in Case No. 207 of 2014 and the last MYT Order in Case No. 31 of 2016, the impact of disallowed capitalisation on Interest on Working Capital (IoWC), contribution to Contingency Reserves, sharing of gains / losses and carrying cost on increase in ARR due had not been considered. In line with the principles adopted for these parameters in those Orders, the Commission has not considered the impact on these items due to the disallowed capitalisation now being approved. Accordingly, the Commission has not allowed any carrying cost on the impact of disallowed capitalisation.

7.13.8 Accordingly, the following Table summarises the computation of carrying/holding cost determined in the present Order.

**Table 154: Carrying/Holding cost for Trued-up ARR for FY 2015-16 and FY 2016-17 approved by Commission (Rs. Crore)**

| Particulars                               | FY 2015-16      | FY 2016-17     | FY 2017-18     | FY 2018-19     |
|---|-----------------|----------------|----------------|----------------|
| Opening balance of Revenue Gap/(Surplus)  | -               | (468.33)       | (287.84)       | (287.84)       |
| Addition during the year                  | (468.33)        | 180.48         | -              | -              |
| Less: Recovery during the year            | -               | -              | -              | (287.84)       |
| Closing balance of Revenue Gap/(Surplus)  | (468.33)        | (287.84)       | (287.84)       | -              |
| Rate of Interest                          | 10.80%          | 10.79%         | 10.20%         | 9.45%          |
| <b>Carrying Cost/(Holding Cost)</b>       | <b>(25.29)</b>  | <b>(40.79)</b> | <b>(29.35)</b> | <b>(13.60)</b> |
| <b>Total Carrying Cost/(Holding Cost)</b> | <b>(109.02)</b> |                |                |                |

7.13.9 The Commission approves an effective Holding Cost of Rs. 109.02 Crore on the cumulative Revenue Gap/(Surplus) pursuant to the True up of ARR for FY 2015-16 and FY 2016-17. This shall be adjusted in the ARR for FY 2018-19.

#### 7.14 Summary of revised estimates of ARR for FY 2018-19 and FY 2019-20

##### *MSETCL's Submission*

7.14.1 Based on the submissions made in the Petition, MSETCL has projected the ARR for FY 2018-19 and FY 2019-20 as per the following Table.

**Table 155: ARR for FY 2018-19 and FY 2019-20, as submitted by MSETCL (Rs. Crore)**

| Particulars                      | FY 2018-19 | FY 2019-20 |
|----------------------------------|------------|------------|
| Operation & Maintenance Expenses | 1,627.43   | 1,708.80   |
| Depreciation Expenses            | 1,062.50   | 1,125.91   |

| Particulars  | FY<br>2018-19   | FY<br>2019-20   |
|--|-----------------|-----------------|
| Interest on Loan Capital   | 850.36          | 832.65          |
| Interest on Working Capital  | 10.00           | 10.00           |
| Other Interest and Finance Charges   | 2.59            | 2.59            |
| Income Tax   | 98.07           | 102.40          |
| Contribution to Contingency Reserves   | 64.67           | 67.56           |
| <b>Total Revenue Expenditure</b>   | <b>3,715.62</b> | <b>3,849.90</b> |
| Add: Return on Equity Capital  | 459.57          | 479.83          |
| <b>Aggregate Revenue Requirement</b>   | <b>4,175.19</b> | <b>4,329.73</b> |
| Less: Non-Tariff Income  | 196.44          | 216.09          |
| Less: Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 181.46          | 199.60          |
| Less: Income from PoC Charges for Inter-State lines                                      | 55.62           | 5.99            |
| <b>Aggregate Revenue Requirement from Transmission</b>                                   | <b>3,741.67</b> | <b>3,908.05</b> |
| Add: Cumulative Revenue gap/(surplus) till previous year                                 | 1,025.22        | -               |
| Add: Impact of disallowed capitalisation   | 55.50           | -               |
| Add: Carrying Cost   | <b>362.44</b>   | -               |
| <b>Net Revenue required from Transmission Tariff</b>                                     | <b>5,184.83</b> | <b>3,908.05</b> |

### *Commission's Analysis and Ruling*

7.14.2 Based on the analysis detailed in the above paragraphs, the Commission has approved the revised estimates of ARR of MSETCL for FY 2018-19 and FY 2019-20 as shown in the following Table.

**Table 156: Revised estimates of ARR for FY 2018-19 and FY 2019-20 approved by Commission (Rs. Crore)**

| Particulars  | FY 2018-19      |                 |                        | FY 2019-20      |                 |                        |
|--|-----------------|-----------------|------------------------|-----------------|-----------------|------------------------|
|  | MYT Order       | MTR Petition    | Approved in this Order | MYT Order       | MTR Petition    | Approved in this Order |
| Operation & Maintenance Expenses   | 1,619.63        | 1,627.43        | 1,439.00               | 1,700.61        | 1,708.80        | 1,510.95               |
| Depreciation Expenses  | 1,023.60        | 1,062.50        | 1,036.10               | 1,061.49        | 1,125.91        | 1,101.46               |
| Interest on Loan Capital   | 746.40          | 850.36          | 811.80                 | 692.43          | 832.65          | 797.90                 |
| Other Interest and Finance Charges   | 5.46            | 2.59            | 2.59                   | 5.46            | 2.59            | 2.59                   |
| Interest on Working Capital and on Consumer Security Deposits                            | 58.06           | 10.00           | 10.00                  | 58.06           | 10.00           | 10.00                  |
| Income Tax   | 247.82          | 98.07           | -                      | 254.10          | 102.40          | -                      |
| Contribution to contingency reserves   | 61.37           | 64.67           | 63.32                  | 62.91           | 67.56           | 65.97                  |
| <b>Total Revenue Expenditure</b>   | <b>3,762.34</b> | <b>3,715.62</b> | <b>3,362.80</b>        | <b>3,835.06</b> | <b>3,849.90</b> | <b>3,488.87</b>        |
| Add: Return on Equity Capital  | 913.40          | 459.57          | 457.00                 | 936.55          | 479.83          | 477.68                 |
| <b>Aggregate Revenue Requirement</b>   | <b>4,675.74</b> | <b>4,175.19</b> | <b>3,819.80</b>        | <b>4,771.61</b> | <b>4,329.73</b> | <b>3,966.55</b>        |
| Less: Non Tariff Income  | 245.55          | 196.44          | 214.08                 | 253.96          | 216.09          | 235.49                 |
| Less: Income from Wheeling Charges from Goa and Dadra and Nagar Haveli and other sources | 61.91           | 181.46          | 181.46                 | 61.91           | 199.60          | 199.60                 |
| Less: Income from PoC charges for Inter-State lines                                      | 178.55          | 55.62           | 55.62                  | 178.55          | 5.99            | 5.99                   |
| <b>Aggregate Revenue Requirement from Transmission</b>                                   | <b>4,189.73</b> | <b>3,741.67</b> | <b>3,368.64</b>        | <b>4,277.19</b> | <b>3,908.05</b> | <b>3,525.47</b>        |
| Add: Impact of Disallowed Capitalisation   | -               | 55.50           | -                      | -               | -               | -                      |
| Add: Carrying Cost / (Holding Cost)  | -               | 362.44          | (109.02)               | -               | -               | -                      |
| Revenue Gap/(Surplus) till previous year   | -               | 1,025.22        | (393.22)               | -               | -               | -                      |
| <b>Net Aggregate Revenue Requirement</b>   | <b>4,189.73</b> | <b>5,184.83</b> | <b>2,866.40</b>        | <b>4,277.19</b> | <b>3,908.05</b> | <b>3,525.47</b>        |

7.14.3 The detailed analysis underlying the Commission's approval of individual ARR elements for FY 2018-19 and FY 2019-20 is already set out above, however, the variation in the ARR sought by the MSETCL and that approved by the Commission in this Order is mainly on account of lower approval of O&M expenses which excludes the escalation factor pertaining to wage revision considered by MSETCL. Further, there is cumulative impact of lower approval of capitalisation in previous years (FY 2015-16 to FY 2017-18) which impacts the depreciation, Interest on Long Term Loans and RoE approved by the Commission. Moreover, the Income Tax liability for FY 2018-19 and FY 2019-20 is Nil as computed in line with the MYT Regulations, 2015.. Moreover, the revised estimates of ARR of FY 2018-19 also include past period Surplus as well as associated holding cost.

7.14.4 **The Commission approves the revised estimates of ARR of Rs. 2,866.40 Crore for FY 2018-19 and Rs. 3,525.47 Crore for FY 2019-20, to be recovered through the subsequent InSTS Tariff Order.**

## **8 EARLIER DIRECTIVES, AND COMPLIANCE STATUS**

### **8.1 Background**

8.1.1 The Commission had given certain directives to MSETCL in the MYT Order in Case No. 31 of 2016. The directives and the status of compliance are set out below.

### **8.2 Benchmarking of proposed costs**

#### ***Directive***

8.2.1 MSETCL is directed to include benchmarking of the proposed costs with the relevant PGCIL cost data along with the Cost Benefit Analysis when submitting Detailed Project Reports (DPRs) for in-principle approval of capital investment.

#### ***MSETCL's Response***

8.2.2 As directed by the Commission, MSETCL is in process of studying the cost data details along with the cost benefit analysis of 400 kV projects of M/s. PGCIL, since it mostly deals with 400 kV projects, and will implement the same in the forthcoming MSETCL projects while submitting these for in-principle approval.

#### ***Commission's Observations/Ruling***

8.2.3 The Commission has noted the submissions of MSETCL.

### **8.3 Details of 66 kV Transmission network**

#### ***Directive***

8.3.1 The Commission has observed that MSETCL has upgraded/eliminated 66kV network over a period of time, but, no information in this regard has been submitted by it. In absence of such information, the Commission has considered the details of Bays and Ckt. Km. as submitted by MSETCL. However, MSETCL is directed to submit the year-wise details of upgradation/elimination of 66 kV network along with its impact on the ARR elements, in the MTR Petition for the 3<sup>rd</sup> Control Period.

#### ***MSETCL's Response***

8.3.2 MSETCL has submitted year wise information of elimination of the 66kV network.

#### ***Commission's Observations/Ruling***

8.3.3 MSETCL's submission is noted. However, MSETCL has not submitted the impact of upgradation / elimination of the 66kV network on the ARR in this Petition. MSETCL

is directed to submit the year-wise details of upgradation/elimination of 66 kV network along with its impact on the ARR elements in the next Tariff Petition.

#### **8.4 Re-visiting 13 schemes with negligible capitalisation**

##### ***Directive***

8.4.1 There are 13 schemes which were approved before March, 2011 but have negligible capitalisation in FY 2014-15 and thereafter, or are not initiated or are very old schemes which are not yet completed. The Commission has disallowed capitalisation pertaining to these schemes. MSETCL should re-visit such schemes to see they are still required or to seek revised approval.

##### ***MSETCL's Response***

8.4.2 Most of these schemes are very old schemes and minor capitalization was appearing during FY 2014-15. Some of the schemes were delayed due to some severe RoW problems. Now most of the schemes are closed in the system and for all closed schemes the work is completed or short closed. The scheme wise detailed justification is submitted as a part of the Petition.

##### ***Commission's Observations/Ruling***

8.4.3 The Commission notes MSETCL's submission. The Commission has dealt with the allowance / disallowance of the capitalisation claimed against these schemes in the earlier Sections of this Order.

#### **8.5 No Capitalisation claimed for 63 schemes**

##### ***Directive***

8.5.1 There are 63 schemes for which there is no claim of capitalisation from FY 2014-15 to FY 2019-20. Of these, some are already completed and some others are ongoing but for which no progress is visible. The Commission has deemed all such schemes to be closed or cancelled, as the case may be, and disallowed the capitalisation towards these schemes. MSETCL should re-visit such schemes to determine their necessity and seek revised approval.

##### ***MSETCL's Response***

8.5.2 Out of total 63 schemes, most of them are very old. Most of these schemes are closed in the system as the work is completed. Very few schemes are cancelled. Some of the schemes are kept on hold as they were not included in STU plan and now are considered in revised STU plan. The capitalisation claimed in FY 2014-15 is very negligible. The scheme wise detailed justification is submitted as a part of the Petition.

### ***Commission's Observations/Ruling***

8.5.3 The Commission notes MSETCL's submission. The Commission has dealt with the allowance / disallowance of the capitalisation claimed against these schemes in the earlier Sections of this Order.

### **8.6 DPR not submitted for schemes**

#### ***Directive***

8.6.1 MSETCL's capitalisation claims include 21 ongoing schemes and 126 proposed schemes for which DPRs have not been submitted for in-principle approval. The Commission has disallowed capitalisation pertaining to these schemes, for which MSETCL should first seek in-principle approval.

### ***MSETCL's Response***

8.6.2 There are two types of scheme under this reason, disallowed by the Commission. There are 29 ongoing schemes and balance schemes are proposed / projected schemes. For most of the ongoing schemes, the DPR was submitted to the Commission and the reference number of the correspondence is mentioned in the detailed explanation sheet. Some proposed schemes were under the approval process at the time of submission of the ARR Petition and the Commission's approval against those schemes was received subsequently. Also, for schemes projected for the period from FY 2017-18 to 2019-20, the DPR could not be submitted to MERC as the schemes were not prepared. The scheme wise detailed justification is submitted as a part of the Petition.

### ***Commission's Observations/Ruling***

8.6.3 The Commission notes MSETCL's submission. The Commission has dealt with the allowance / disallowance of the capitalisation claimed against these schemes in the earlier Sections of this Order.

### **8.7 Four Schemes initiated in MSEB period**

#### ***Directive***

8.7.1 4 schemes were initiated in the erstwhile MSEB period (in FY 1996-97, FY 1997-98, FY 1999-2000, FY 2002-03). Schemes pertaining to Line works in Nagpur Zone with a Board Resolution of 1996 and a 220 kV Pargaon Sub-station with Board Resolution of 1999 figure in the capitalisation claimed by MSETCL. The Commission is surprised to find that schemes initiated around twenty years ago are still under implementation. MSETCL has not provided detailed information regarding past capitalisation and assets capitalised against these schemes. Hence, the Commission has disallowed the capitalisation pertaining to these schemes. MSETCL is directed to



report their status and obtain approval of the Commission before seeking capitalisation against them.

### **MSETCL's Response**

8.7.2 These are very old schemes but now closed in the system. The minor balance capitalisation was captured in FY 2014-15. The scheme wise detailed justification is submitted as a part of the Petition.

### ***Commission's Observations/Ruling***

8.7.3 The Commission notes MSETCL's submission. The Commission has dealt with the allowance / disallowance of the capitalisation claimed against these schemes in the earlier Sections of this Order.

## **8.8 Schemes not verified due to incomplete information**

### ***Directive***

8.8.1 5 ongoing and 13 proposed schemes could not be verified due to incomplete information. Elementary information as required for prudence check by the Commission has not been submitted by MSETCL in respect of these schemes. Hence, the Commission has not allowed Capitalisation pertaining to these schemes. MSETCL may furnish the requisite details along with documentary evidence to substantiate its claims in subsequent Tariff Petitions for approval of Capitalisation pertaining to these schemes.

### ***MSETCL's Response***

8.8.2 The information of all of these 5 ongoing schemes is provided as a part of this Petition. Most of the schemes are now closed in the system as the work is completed. Most of the schemes out of the 13 schemes were proposed schemes and proposals for some of these are now under process, while the work for other schemes is covered in the revised STU plan. Also, there is no capitalization claimed during FY 2014-15 against these schemes. The scheme wise detailed justification is submitted as a part of the Petition.

### ***Commission's Observations/Ruling***

8.8.3 The Commission notes MSETCL's submission. The Commission has dealt with the allowance / disallowance of the capitalisation claimed against these schemes in the earlier Sections of this Order.

## **8.9 Utilisation of Bays**

### ***Directive***

- 8.9.1 MSETCL should follow-up with MSEDCL for utilisation of all the Bays disallowed by the Commission.

### ***MSETCL's Response***

- 8.9.2 MSETCL is doing the regular follow up with MSEDCL for utilization of unutilized bays on account of which load is taken during the FY 2015-16 & FY2016-17 on a total of 183 bays. Also, there are total 696 bays earmarked for utilization (including spare bays as per MSETCL's policy i.e. 2 Nos. of bays per Sub-station for HV consumer or urgent requirement of MSEDCL) as on April, 2017. The copies of correspondence with MSEDCL are submitted as a part of the Petition.

### ***Commission's Observations/Ruling***

- 8.9.3 MSETCL's compliance is noted. Documentary evidence submitted in support of MSETCL's claim for follow-up with MSEDCL for utilisation of the Bays is also examined. The Commission has dealt with the allowance / disallowance of the capitalisation claimed against such Bays in the earlier Sections of this Order. However, MSETCL has not made the Commission aware about its policy of maintaining two spare bays at each Sub-station. As on date, MSETCL has more than 650 EHV Sub-stations and considering two spare bays at each sub-station, then the quantity of spares bays would exceed 1000 bays which would lead to blocking of substantial cost in such un-utilised assets. Further, there does not appear to be any urgent demand from the Distribution Licensees for Transmission infrastructure as they are also required to construct 33 / 22 kV Lines and Sub-stations to feed the consumers. Hence, MSETCL should construct additional bays on priority only in case there is a demand from the Distribution Licensees. Therefore, the Commission directs the STU to apprise the Commission regarding the exact quantum of spare / un-utilised bays of all the Transmission Licensees in the State of Maharashtra, within three months from the date of this Order.

## **8.10 Capex proposals regarding schemes for Distribution Licensees**

### ***Directive***

- 8.10.1 Capex proposals submitted by MSETCL for in-principle approval in respect of schemes for use by a Distribution Licensee should henceforth be accompanied by a commitment letter from such Licensee confirming the requirement and its readiness to utilize the assets, upon completion, without delay, failing which the Commission may not accord in-principle approval to such schemes. This requirement shall not apply to schemes undertaken only for strengthening the InSTS.

### ***MSETCL's Response***

8.10.2 MSETCL has noted this directive and accordingly the new proposals for in-principle approval are being accompanied by the commitment letter from MSEDCL confirming the utilization of the assets upon its completion, without any delay.

### ***Commission's Observations/Ruling***

8.10.3 MSETCL's compliance is noted. MSETCL is directed to continue following this requirement for all such proposals in future. Moreover, henceforth, if the asset is not put to use without any valid reasons, the Commission may consider allowing the ARR on the Capital Cost of the asset depreciated for the period from the approved completion as per in-principle approval to the actual completion and put to use.

## **8.11 Study of best practices in Transmission**

### ***Directive***

8.11.1 The Commission observes that a study which provides meaningful benchmarks and national best practices in Transmission which can be implemented in Maharashtra after State-specific customisation needs to be undertaken by MSETCL. MSETCL is directed to undertake the necessary studies and update the Commission on the status of implementation of the above identified measures as well as the study pertaining to best practises in Transmission at the time of the next Mid-term Review filing.

### ***MSETCL's Response***

8.11.2 MSETCL has taken-up the programme of installation of capacitor banks at EHV & HV level in a phased manner. Under the first phase, MSETCL has already added 580 MVAR of capacitive compensation and sanctioned schemes for installation of capacitor banks (PH II 705 MVAR) & (PH III 1180 MVAR). This has resulted in significant improvement in voltage profile as well as loss reduction.

8.11.3 With regard to the modern trends and best practices in Transmission, feasibility of use of Flexible AC Transmission System Devices (FACTS) is being studied. A team of MSETCL's engineers have already visited one such installation of static VAR compensation (SVC) of M/s Siemens. Further, possibility of installation of STATCOM is also being explored at locations where acute variation in system Voltage is experienced during Peak & Off peak hours. Furthermore, it is proposed to use HTLS conductor having low losses, as a replacement for critically loaded lines.

### ***Commission's Observations/Ruling***

8.11.4 MSETCL's compliance is noted. Further, MSETCL is directed to submit to the Commission, a detailed report covering the aspects of the study undertaken and inferences drawn from this study within three months from this Order.

## 9 RECOVERY OF TRANSMISSION CHARGES

As MSETCL forms a part of the InSTS, its approved ARR for FY 2018-19 and FY 2019-20 shall be allowed to be recovered through the Commission's subsequent InSTS Transmission Tariff Order in terms of the Intra-State Transmission pricing framework and as specified in the MYT Regulations, 2015.

## 10 APPLICABILITY OF THE ORDER

This Order on approval of the Truing-up of ARR for FY 2015-16 and FY 2016-17, Provisional Truing-up of ARR for FY 2017-18 and the revised estimates of ARR for FY 2018-19 and FY 2019-20 shall come into force from 1 September, 2018.

The Petition of the Maharashtra State Electricity Transmission Co. Ltd. in Case No. 168 of 2017 stands disposed of accordingly.

**Sd/-**  
**(Mukesh Khullar)**  
**Member**

**Sd/-**  
**(I. M. Bohari)**  
**Member**

**Sd/-**  
**(Anand B. Kulkarni)**  
**Chairperson**

  
**(Abhijit Deshpande)**  
**Secretary**



### **Appendix – 1**

#### **List of persons at the pre-admittance discussion on 14 December, 2018**

| <b>Sr. No.</b> | <b>Name of the representative</b> | <b>Organisation</b> |
|----------------|-----------------------------------|---------------------|
| 1.             | Shri Rohit Jadye                  | PwC                 |
| 2.             | Ms. Kavita Mahajan                | MSETCL              |
| 3.             | Shri. S. S. Rajurkar              | MSETCL              |
| 4.             | Shri. C. N. Bendre                | MSETCL              |
| 5.             | Mrs. J. N. Chimte                 | MSETCL              |
| 6.             | Shri. M. L. Gutte                 | MSETCL              |
| 7.             | Shri. K. D. Daware                | MSETCL              |
| 8.             | Shri. S. N. Suryavanshi           | MSETCL              |
| 9.             | Shri. S. D. Sharma                | MSETCL              |
| 10.            | Shri. U. P. Lanjewar              | MSETCL              |
| 11.            | Shri. A. R. Kelkar                | MSETCL              |

### **Appendix – 2**

#### **List of persons at the pre-admittance discussion on 22 February, 2018**

| <b>Sr. No.</b> | <b>Name of the representative</b> | <b>Organisation</b> |
|----------------|-----------------------------------|---------------------|
| 1.             | Shri R Chavan                     | MSETCL              |
| 2.             | Shri S. D. Sharma                 | MSETCL              |
| 3.             | Shri S. S. Rajurkar               | MSETCL              |
| 4.             | Shri S. N. Suryawanshi            | MSETCL              |
| 5.             | Smt. C. N. Bendre                 | MSETCL              |
| 6.             | Shri A. S. Kadam                  | MSETCL              |
| 7.             | Shri Naman Hegde                  | PwC                 |
| 8.             | Shri M. L. Gutte                  | MSETCL              |
| 9.             | Smt. Smita P. Pathare             | MSETCL              |
| 10.            | Shri K. D. Daware                 | MSETCL              |
| 11.            | Shri U. P. Lanjewar               | MSETCL              |
| 12.            | Smt. Akshata Naik                 | MSETCL              |
| 13.            | Shri Rohit Jadye                  | PwC                 |

**Appendix – 3**

**List of persons at the Public Hearing on 23 July, 2018**

| <b>Sr. No.</b> | <b>Name of the Participant</b> | <b>Organisation</b> |
|----------------|--------------------------------|---------------------|
| 1              | Shri Sunil Dutt Sharma         | MSETCL              |
| 2              | Shri Swapnil Kumre             | MSETCL              |
| 3              | Shri Tej Singh                 | MSETCL              |
| 4              | Smt. J. M. Wagh                | MSETCL              |
| 5              | Shri S. N. Suryawanshi         | MSETCL              |
| 6              | Shri V. K. Sathe               | MSETCL              |
| 7              | Shri S. N. Bhopale             | MSETCL              |
| 8              | Shri A. N. Kalekar             | MSETCL              |

**Appendix – 4****List of schemes pertaining to Disallowed Capitalisation considered for analysis and approval****1. FY 2010-11 Wind Evacuation Schemes****Wind Evacuation Schemes disallowed earlier in FY 2010-11**

| Sr. No. | Name of Developer  | Capitalisation Approved (Rs. Crore)* | Status of Approval | Year in which Capitalisation has been considered |
|---------|--------------------|--------------------------------------|--------------------|--|
| 1       | Enercon India      | 3.20                                 | Approved           | FY 2015-16                                       |
| 2       | Wind World (I) ltd | 1.60                                 | Approved           | FY 2015-16                                       |
| 3       | Suzlon Energy Ltd  | 5.26                                 | Approved           | FY 2015-16                                       |
| 4       | Suzlon Energy Ltd  | 5.26                                 | Approved           | FY 2016-17                                       |
|         | <b>Total</b>       | <b>15.33</b>                         |                    |  |

\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

**2. FY 2011-12: (Capitalisation claimed on utilisation of 33/22/11 kV Bays)**

| Sr. No. | Name of scheme   | Zone       | Number of bays |       |       | Name of Feeder/bays | Status of Approval | Year       | No. of Bays Approved | Total Amount (Rs. Lakh)* |
|---------|--|------------|----------------|-------|-------|---------------------|--------------------|------------|----------------------|--------------------------|
|         |  |            | 33 kV          | 22 kV | 11 kV |                     |                    |            |                      |                          |
| 1       | Establishment of 132/33 kV at Hiwarkhed S/S, Dist. Akola | Amravati   | 1              | 0     | 0     | 33kv Belkhed        | Approved           | FY 2017-18 | 1                    | 18.57                    |
| 2       | Establishment of 132/33 kV S/S at Patur, Dist Akola      | Amravati   | 1              | 0     | 0     | 33 kV Channi        | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 3       | Establishment of 132/33 kV Badnapur S/S, Dist. Jalna     | Aurangabad | 1              | 0     | 0     | 33KV Iktuni         | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |  | Aurangabad | 1              | 0     | 0     | 33KV Keli gawan     | Disallowed         |            | 0                    | -                        |
| 4       | 132 kV Soygaon S/S                                       | Aurangabad | 1              | 0     | 0     | 33 KV Jarandi       | Approved           | FY 2016-17 | 1                    | 18.57                    |

| Sr. No. | Name of scheme   | Zone       | Number of bays |       |       | Name of Feeder/bays  | Status of Approval | Year       | No. of Bays Approved | Total Amount (Rs. Lakh)* |
|---------|--|------------|----------------|-------|-------|----------------------|--------------------|------------|----------------------|--------------------------|
|         |  |            | 33 kV          | 22 kV | 11 kV |                      |                    |            |                      |                          |
| 5       | Establishment of 132/33 kV S/Sat Mahakala, Dist. Jalna                               | Aurangabad | 1              | 0     | 0     | 33kV Chandnaappuri   | Approved           | FY 2015-16 | 1                    | 18.57                    |
| 6       | Establishment of 220/132/33 kV S/S at Hingoli, Dist. Hingoli                         | Aurangabad | 1              | 0     | 0     | 33kV Water Supply    | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 7       | Establishment of 132/33 kV S/Sat Sonpeth, Dist. Parbhani                             | Aurangabad | 1              | 0     | 0     | 33kV Injegaon        | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 8       | Installation of additional (1 x 25 MVA, 132/33 kV) T/F capacity at 132 kV Basmat S/S | Aurangabad | 1              | 0     | 0     | 33kV Gunda           | Approved           | FY 2017-18 | 1                    | 18.57                    |
| 9       | Establishment of 220 kV S/S at Patoda, Dist. Beed                                    | Aurangabad | 1              | 0     | 0     | 33kV Kuslamb         | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 10      | Establishment of 220/132/33 kV Paranda S/S, Dist. Osmanabad                          | Aurangabad | 1              | 0     | 0     | 33kV Waradhwadi      | Approved           | FY 2016-17 | 1                    | 18.57                    |
|         |  | Aurangabad | 1              | 0     | 0     | 33kV Shirala rural   | Approved           | FY 2016-17 | 1                    | 18.57                    |
|         |  | Aurangabad | 1              | 0     | 0     | 33kV Jawala          | Approved           | FY 2016-17 | 1                    | 18.57                    |
|         |  | Aurangabad | 1              | 0     | 0     | 33kV Anala           | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 11      | Establishment of 220 kV S/Sat Tuljapur, Dist. Osmanabad                              | Aurangabad | 1              | 0     | 0     | 33KV Kati Feeder     | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 12      | Establishment of 220 kV S/Sat Mudhaltitta, Dist. Kolhapur                            | Karad      | 1              | 0     | 0     | 33kV Kurni           | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |  | Karad      | 1              | 0     | 0     | 33kV Mudhaltita      | Approved           | FY 2015-16 | 1                    | 18.57                    |
| 13      | 220 kV Kagal S/S   | Karad      | 1              | 0     | 0     | 33kV Mantri Metallic | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |  | Karad      | 1              | 0     | 0     | 33kV Minor           | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |  | Karad      | 1              | 0     | 0     | 33kV Apple sponge    | Approved           | FY 2015-16 | 1                    | 18.57                    |



| Sr. No. | Name of scheme  | Zone  | Number of bays |       |       | Name of Feeder/bays       | Status of Approval | Year       | No. of Bays Approved | Total Amount (Rs. Lakh)* |
|---------|---|-------|----------------|-------|-------|---------------------------|--------------------|------------|----------------------|--------------------------|
|         |   |       | 33 kV          | 22 kV | 11 kV |                           |                    |            |                      |                          |
|         |   | Karad | 1              | 0     | 0     | 33kV KOEL                 | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |   | Karad | 1              | 0     | 0     | 33kV Ambe                 | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |   | Karad | 1              | 0     | 0     | 33kV UTP                  | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |   | Karad | 1              | 0     | 0     | 33kV GPI                  | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |   | Karad | 1              | 0     | 0     | 33kV Oswal                | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |   | Karad | 1              | 0     | 0     | 33kV Hupari               | Approved           | FY 2015-16 | 1                    | 18.57                    |
| 14      | Installation of additional T/F in 220 kV Sawantwadi S/S                                 | Karad | 1              | 0     | 0     | 33kV Malewad Feeder       | Approved           | FY 2017-18 | 1                    | 18.57                    |
| 15      | Replacement of existing transformers by higher capacity transformers in Kolhapur Circle | Vashi | 1              | 0     | 0     | 33kV MIDC feeder          | Approved           | FY 2015-16 | 1                    | 18.57                    |
| 16      | Establishment of 220 kV Niwali-Phata S/S Dist. Ratnagiri                                | Vashi | 1              | 0     | 0     | 33kV Pali-Sakharpa Feeder | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |   | Vashi | 1              | 0     | 0     | 33kV Kotavade Feeder      | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |   | Vashi | 1              | 0     | 0     | 33kV Panval Feeder        | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 17      | Establishment of 220 kV S/S at Bapgaon, Dist Thane                                      | Vashi | 0              | 1     | 0     | 22 kV Renaissance Feeder  | Approved           | FY 2017-18 | 1                    | 18.57                    |
| 18      | Establishment of 400/220 kV S/S at Chakan, Dist. Pune                                   | Pune  | 0              | 1     | 0     | 22 KV Chimbli feeder      | Approved           | FY 2016-17 | 1                    | 18.57                    |
|         |   | Pune  | 0              | 1     | 0     | 22 KV Alandi phata feeder | Approved           | FY 2015-16 | 1                    | 18.57                    |
|         |   | Pune  | 0              | 1     | 0     | 22 KV Renuka              | Approved           | FY 2016-17 | 1                    | 18.57                    |

| Sr. No. | Name of scheme   | Zone              | Number of bays |          |          | Name of Feeder/bays     | Status of Approval | Year                              | No. of Bays Approved | Total Amount (Rs. Lakh)* |
|---------|--|-------------------|----------------|----------|----------|-------------------------|--------------------|-----------------------------------|----------------------|--------------------------|
|         |  |                   | 33 kV          | 22 kV    | 11 kV    |                         |                    |                                   |                      |                          |
|         |  |                   |                |          |          | feeder                  |                    |                                   |                      |                          |
| 19      | 220 kV Yewalewadi S/S (VSNL)   | Pune              | 0              | 1        | 0        | 22kV Bopkhel (Infra II) | Approved           | FY 2017-18                        | 1                    | 18.57                    |
|         |  | Pune              | 0              | 1        | 0        | 22kV Dhanori (Infra II) | Approved           | FY 2017-18                        | 1                    | 18.57                    |
| 20      | 132 kV Shirur  | Pune              | 1              | 0        | 0        | 33kV Nimone             | Approved           | FY 2017-18                        | 1                    | 18.57                    |
| 21      | Establishment of 220/22 kV S/Sat Urse, Tal. Maval, Dist. Pune                        | Pune              | 0              | 1        | 0        | 22kV La-Montana         | Approved           | FY 2015-16                        | 1                    | 18.57                    |
| 22      | Establishment of 132/33 kV Lakhandur S/S, Dist. Bhandara                             | Nagpur            | 1              | 0        | 0        | 33kv KESHORI            | Approved           | FY 2016-17                        | 1                    | 18.57                    |
| 23      | 132 kV Bharshingi, Dist. Nagpur  | Nagpur            | 1              | 0        | 0        | 33 KV WATHODA           | Approved           | FY 2016-17                        | 1                    | 18.57                    |
|         |  | Nagpur            | 1              | 0        | 0        | 33 KV THADIPAWANI       | Approved           | FY 2017-18                        | 1                    | 18.57                    |
| 24      | Installation of additional (1 x 25 MVA, 132/33 kV T/F ) capacity at 132 kV Mul S/S   | Nagpur            | 1              | 0        | 0        | 33kV Chakpiranji        | Approved           | FY 2016-17                        | 1                    | 18.57                    |
|         |  | Nagpur            | 1              | 0        | 0        | 33kV Mul-2              | Approved           | FY 2016-17                        | 1                    | 18.57                    |
| 25      | Installation of additional (1 x 25 MVA, 132/33 kV) T/F capacity at 132 kV Bodwad S/S | Nashik            | 1              | 0        | 0        | 1) 33kV Golegaon        | Approved           | FY 2016-17                        | 1                    | 18.57                    |
|         |  | Nashik            | 1              |          |          | 2) 33kV Ranjani         | Approved           | FY 2016-17                        | 1                    | 18.57                    |
|         |  | <b>Total Bays</b> | <b>39</b>      | <b>7</b> | <b>0</b> | <b>46</b>               |                    | <b>Total Approved</b>             | <b>45</b>            | <b>835.65</b>            |
|         |  |                   |                |          |          |                         |                    | <b>Total Approved (Rs. Crore)</b> | <b>45</b>            | <b>8.36</b>              |

*\* This is the gross capitalisation considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.*

### 3. FY 2012-13 : (Capitalisation claimed on utilisation of 33/22/11 kV Bays)

| Sr No. | Scheme         | Zone       | Number of bays |       |       | Name of Feeder/bays | Status of Approval | Year       | No. of Bays approved | Total Amount (Rs. Lakh)* |
|--------|----------------|------------|----------------|-------|-------|---------------------|--------------------|------------|----------------------|--------------------------|
|        |                |            | 33 kV          | 22 kV | 11 kV |                     |                    |            |                      |                          |
| 1      | 220 KV Jalna   | AURANGABAD | 2              | 0     | 0     | 33KV Switching      | Disallowed         |            | -                    | -                        |
|        |                |            |                |       |       | 33KV Matsodari      | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 2      | 132 KV Pishor  | AURANGABAD | 1              | 0     | 0     | shelgaon feeder     | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 3      | 132KV Vaijapur | AURANGABAD | 2              | 0     | 0     | 33kv Loni           | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |                |            |                |       |       | 33KV Talegaon       | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 4      | 220KV Bhokar   | AURANGABAD | 4              | 0     | 0     | 33 KV Matul         | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |                | AURANGABAD |                |       |       | 33 KV Bhosi         | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |                | AURANGABAD |                |       |       | 33 KV Kini          | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |                | AURANGABAD |                |       |       | 33 KV Bhokar        | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 5      | 132KV Pangri   | AURANGABAD | 2              | 0     | 0     | 33kv Sangam         | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |                | AURANGABAD |                |       |       | 33kv Parli Arban    | Approved           | FY 2015-16 | 1                    | 18.57                    |
| 6      | 220KV Paranda  | AURANGABAD | 4              | 0     | 0     | 33kv Waradhwadi     | Approved           | FY 2016-17 | 1                    | 18.57                    |

| Sr No. | Scheme                    | Zone       | Number of bays |       |       | Name of Feeder/bays                  | Status of Approval | Year       | No. of Bays approved | Total Amount (Rs. Lakh)* |
|--------|---------------------------|------------|----------------|-------|-------|--------------------------------------|--------------------|------------|----------------------|--------------------------|
|        |                           |            | 33 kV          | 22 kV | 11 kV |                                      |                    |            |                      |                          |
|        |                           | AURANGABAD |                |       |       | 33kV Shirala rural                   | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |                           | AURANGABAD |                |       |       | 33kV Jawala                          | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |                           | AURANGABAD |                |       |       | 33kV Anala                           | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 7      | 132Kv Raimoha             | AURANGABAD | 2              | 0     | 0     | 33 KV SAKSHALPIMPRI                  | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |                           | AURANGABAD |                |       |       | 33 kV FULSANGVI                      | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 8      | 220KV Niwaliphata SS      | KARAD      | 3              | -     | -     | 33kV Pali-Sakharpa Feeder            | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |                           |            |                |       |       | 33kV Kotavade Feeder                 | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |                           |            |                |       |       | 33kV Panval Feeder                   | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 9      | 220 KV Khopoli (Tambati)  | VASHI      |                | 1     |       | 22kV ALLana                          | Approved           | FY 2015-16 | 1                    | 18.57                    |
| 10     | 100 KV Khopoli - JBIC     | VASHI      |                | 2     |       | 22kV Lauji                           | Approved           | FY 2017-18 | 1                    | 18.57                    |
|        |                           |            |                |       |       | 22kV mulgon                          | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 11     | Estt. of 220KV Magarpatta | Pune       |                | 4     |       | 22kV Jahangir Nagar-1                | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |                           | Pune       |                |       |       | 22kV Jahangir Nagar-2                | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |                           | Pune       |                |       |       | 22kV PMC WATER PLANT & DRAINAGE      | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |                           | Pune       |                |       |       | 22kV M/S Marvel Sigma Homes Pvt.Ltd. | Approved           | FY 2015-16 | 1                    | 18.57                    |

| Sr No. | Scheme                                   | Zone      | Number of bays |       |       | Name of Feeder/bays   | Status of Approval | Year       | No. of Bays approved | Total Amount (Rs. Lakh)* |
|--------|--|-----------|----------------|-------|-------|-----------------------|--------------------|------------|----------------------|--------------------------|
|        |  |           | 33 kV          | 22 kV | 11 kV |                       |                    |            |                      |                          |
| 12     | Estt. of 220KV Khadakwasla (Nanded city) | PUNE      |                | 8     |       | PMC Warje Water works | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |  | PUNE      |                |       |       | Urbangram             | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |  | PUNE      |                |       |       | Khadakwasala          | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |  | PUNE      |                |       |       | Amit 1                | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |  | PUNE      |                |       |       | Madhukosh             | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |  | PUNE      |                |       |       | Rajyog                | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |  | PUNE      |                |       |       | Takshshila            | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        |  | PUNE      |                |       |       | PMC NDA Water works   | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 13     | 220KV Bhosari (Akurdi) SS                | PUNE      |                | 1     |       | 22kV Wadmukhwadi      | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 14     | 132KV NCL SS                             | PUNE      |                | 1     |       | 22kV C-DAC            | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 15     | 220KV Virur SS                           | NAGPUR    | 1              | 0     | 0     | 33 kv Tohogaon        | Approved           | FY 2016-17 | 1                    | 18.57                    |
| 16     | 220KV Hinganghat SS                      | NAGPUR    | 1              |       |       | 33 KV Hinganghat 1    | Approved           | FY 2015-16 | 1                    | 18.57                    |
| 17     | Aug by replace/addition under NGP Zone   | NAGPUR    | 1              |       |       | 33 kV Jaitala         | Approved           | FY 2015-16 | 1                    | 18.57                    |
|        | 132 kV Hingana-I                         | NAGPUR    | 1              | 0     | 0     | 33 kV Issali          | Approved           | FY 2016-17 | 1                    | 18.57                    |
|        |  | NAGPUR    |                |       |       |                       | Approved           |            | -                    | -                        |
|        |  | NAGPUR    |                |       |       |                       | Approved           |            | -                    | -                        |
| 18     | 132KV Ghatanji SS                        | AMARAVATI | 1              | nil   | nil   | Shiroli               | Approved           | FY 2015-16 | 1                    | 18.57                    |
| 19     | 132KV Pandharkawada-II SS                | AMARAVATI | 1              |       |       | Rajurwadi             | Approved           | FY 2016-17 | 1                    | 18.57                    |

| Sr No. | Scheme             | Zone              | Number of bays |           |          | Name of Feeder/bays  | Status of Approval                | Year       | No. of Bays approved | Total Amount (Rs. Lakh)* |
|--------|--------------------|-------------------|----------------|-----------|----------|----------------------|-----------------------------------|------------|----------------------|--------------------------|
|        |                    |                   | 33 kV          | 22 kV     | 11 kV    |                      |                                   |            |                      |                          |
| 20     | 220KV Badnera SS   | AMARAVATI         | 1              |           |          | MIDC-I               | Approved                          | FY 2015-16 | 1                    | 18.57                    |
| 21     | 220KV Dondaicha SS | NASIK             | 3              | 0         | 0        | 33KV Degav           | Approved                          | FY 2016-17 | 1                    | 18.57                    |
|        |                    | NASIK             |                |           |          | 33KV Vaidane         | Approved                          | FY 2016-17 | 1                    | 18.57                    |
|        |                    | NASIK             |                |           |          | 33KV Dondaicha Urban | Approved                          | FY 2016-17 | 1                    | 18.57                    |
| 22     | 132KV Manmad       | NASIK             | 1              |           |          | 33 kv Manmad         | Approved                          | FY 2015-16 | 1                    | 18.57                    |
| 23     | 132KV Taloda       | NASIK             | 2              | 0         | 0        | 33KV Pratappur       | Approved                          | FY 2015-16 | 1                    | 18.57                    |
|        |                    | NASIK             |                |           |          | 33KV Khapar          | Approved                          | FY 2016-17 | 1                    | 18.57                    |
| 24     | 220KV Shahada      | NASIK             | 2              | 0         | 0        | 33KV Kudawad         | Approved                          | FY 2016-17 | 1                    | 18.57                    |
|        |                    |                   |                |           |          | 33KV Kudawad         | Approved                          | FY 2016-17 | 1                    | 18.57                    |
|        |                    | <b>Total Bays</b> | <b>35</b>      | <b>17</b> | <b>0</b> | <b>52</b>            | <b>Total Approved</b>             |            | <b>51</b>            | <b>947.07</b>            |
|        |                    |                   |                |           |          |                      | <b>Total Approved (Rs. Crore)</b> |            | <b>51</b>            | <b>9.47</b>              |

\* This is the gross capitalisation considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

#### 4. FY 2012-13 B – (Scheme approved in-principle during or before March 2011 for which there is negligible capitalization)

| Sr. No. | MERC Approved Name   | Capitalization (Rs. Crore)* | Status of the Scheme | Year of Approval |
|---------|--|-----------------------------|----------------------|------------------|
| 1       | 1- Establishment of 132/33 kV substation at Rajur, Dist- Jalna<br>2- Establishment of 220/22 kV substation at Khudus, Dist- Thane<br>3- Establishment of 220/100 kV substation at Vasai, Dist- Thane | 7.31                        | Approved             | FY 2015-16       |

| Sr. No.      | MERC Approved Name   | Capitalization (Rs. Crore)* | Status of the Scheme | Year of Approval |
|--------------|--|-----------------------------|----------------------|------------------|
| 2            | Establishment of 400/220 kV Hinjewadi substation, Dist. Pune | 0.05                        | Approved             | FY 2019-20       |
| 3            | Establishment of 400/220 kV Kudus substation, dist. Thane    | 4.51                        | Approved             | FY 2017-18       |
| <b>Total</b> |  | <b>11.87</b>                |                      |                  |

\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

#### 5. FY 2012-13 C – (Negligible capitalization as per half yearly progress report)

| Sr. No.      | Name of the Scheme   | Capitalization (Rs. Crore)* | Status of Approval | Year of Approval |
|--------------|--|-----------------------------|--------------------|------------------|
| 1            | Establishment of 100/22 KV Mumbra S/S, Dist-Thane  | 0.03                        | Approved           | FY 2015-16       |
| 2            | Establishment of 220/33 KV substation with 2x25 MVA,220/33 KV T/Fs at Bhalwani, Dist.-Solapur” | 0.00                        | Approved           | FY 2015-16       |
| 3            | Establishment of 132/33 kV substation at Arni, Dist. Yavatmal                                  | 0.41                        | Approved           | FY 2015-16       |
| 4            | Establishment of 132/33 KV Sub-station at Bhusawal, Dist. - Jalgaon                            | 0.11                        | Approved           | FY 2016-17       |
| 5            | Establishment of 132/33 KV Sub-station at Dharni, Dist. Amravati                               | 0.03                        | Approved           | FY 2016-17       |
| <b>Total</b> |  | <b>0.59</b>                 |                    |                  |

\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

#### 6. FY 2012-13 D – (DPR not submitted earlier)

| Sr. No. | Name of the Scheme                | Capitalization (Rs. Crore)* | Status of Approval | Year of Approval |
|---------|-----------------------------------|-----------------------------|--------------------|------------------|
| 1       | Rep. of equip. at 220KV Parli GCR | 3.03                        | Approved           | FY 2015-16       |
| 2       | Aug of ss under Nasik Zone        | -                           | Disallowed         |                  |

| Sr. No. | Name of the Scheme                     | Capitalization (Rs. Crore)* | Status of Approval | Year of Approval |
|---------|--|-----------------------------|--------------------|------------------|
|         | Aug. of various ss under Nasik Zone by |                             | Disallowed         |                  |
|         | REPLACEMENT OF T/Fs in PUNE            |                             | Disallowed         |                  |
|         | Aug. by replacement of T/F             | 14.43                       | Approved           | FY 2015-16       |
|         | Aug by replace/addition under NGP Zone |                             | Approved           | FY 2015-16       |
|         | 220KV Nalasopara                       |                             | Approved           | FY 2015-16       |
|         | 220 KV Khopoli (Tambati)               |                             | Approved           | FY 2015-16       |
|         | <b>Total</b>                           | <b>17.47</b>                |                    |                  |

\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

#### 7. FY 2012-13 E – (Part capitalization on account of land development, civil work etc.)

| Sr. No. | Name of the Scheme  | Capitalization (Rs. Crore)* | Status of Approval | Year of Approval |
|---------|---|-----------------------------|--------------------|------------------|
| 1       | Establishment of 400/220 kV Kudus substation, dist. Thane   | 4.51                        | Approved           | FY 2017-18       |
| 2       | Establishment of 2 x 50 MVA, 132/33 KV Sub-station at Manegaon, Tal.- Sangola, Dist. – Solapur                | 0.85                        | Approved           | FY 2016-17       |
| 3       | Establishment of 220/33 kV Sub-station at Vairag, Dist. Solapur   | 0.36                        | Approved           | FY 2016-17       |
| 4       | Establishment of 132/33 kV substation at Arni, Dist. Yavatmal   | 0.41                        | Approved           | FY 2015-16       |
| 5       | Establishment of 132/33 KV Sub-station at Dharni, Dist. Amravati  | 0.03                        | Approved           | FY 2016-17       |
| 6       | Installation of additional 4 x 167 MVA, 400/220/33 kV ICT each at 400 kV Nagothane S/S & 400 kV Newkoyana S/S | 7.00                        | Approved           | FY 2015-16       |
|         | <b>Total</b>  | <b>13.16</b>                |                    |                  |

\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.



**8. FY 2013-14 A – (Capitalisation claimed on utilisation of 33/22/11 kV Bays)**

| Sr. No. | Name of the Scheme                      | Zone       | Number of bays |       |       | Name of Feeder/bays    | Status of Approval | Year of Approval | No. of Bays Approved | Total Amount (Rs. Lakh)* |
|---------|---|------------|----------------|-------|-------|------------------------|--------------------|------------------|----------------------|--------------------------|
|         |   |            | 33 kV          | 22 kV | 11 kV |                        |                    |                  |                      |                          |
| 1       | 220KV Deogaon-Rangari                   | AURANGABAD | 1              | 0     | 0     | 33KV Devgaon Rangari   | Approved           | FY 2016-17       | 1                    | 18.57                    |
| 2       | Aug of Pishor, Pathri&Satara(Deolai) ss | AURANGABAD | 1              | 0     | 0     | 33KV Shelgaon bay      | Approved           | FY 2016-17       | 1                    | 18.57                    |
| 3       | 132 KV Raimoha                          | AURANGABAD | 1              | 0     | 0     | 33 KV SAKSHALPIMPRI    | Approved           | FY 2015-16       | 1                    | 18.57                    |
|         |   | AURANGABAD | 1              | 0     | 0     | 33 kV FULSANGVI        | Approved           | FY 2016-17       | 1                    | 18.57                    |
| 7       | 100KV Tambati                           | VASHI      | 0              | 1     | 0     | 22kV Polygamma         | Disallowed         |                  | -                    | -                        |
| 5       | 132KV Shirur SS                         | PUNE       | 1              | 0     | 0     | 33kV Nimone            | Approved           | FY 2017-18       | 1                    | 18.57                    |
| 6       | 220KV Tadali SS                         | NAGPUR     | 2              | 0     | 0     | 33KV OMTEE STEEL       | Approved           | FY 2015-16       | 1                    | 18.57                    |
|         |   | NAGPUR     |                |       |       | 33KV NEW TADALI        | Approved           | FY 2016-17       | 1                    | 18.57                    |
| 7       | 220KV Wardha-II SS                      | NAGPUR     | 1              | 0     | 0     | 33kV Borgaon           | Approved           | FY 2016-17       | 1                    | 18.57                    |
|         |   | NAGPUR     | 1              | 0     | 0     | 33 kV Sewagram 2       | Approved           | FY 2017-18       | 1                    | 18.57                    |
|         |   | NAGPUR     | 1              | 0     | 0     | 33 kV Hinganghat       | Approved           | FY 2016-17       | 1                    | 18.57                    |
| 8       | 132KV Ghodegaon SS                      | NASIK      | 1              | 0     | 0     | 33KV MIDC Pandharipool | Approved           | FY 2015-16       | 1                    | 18.57                    |
|         |   | NASIK      | 1              | 0     | 0     | 33KV Ghodegaon         | Approved           | FY 2016-17       | 1                    | 18.57                    |
|         |   | NASIK      | 1              | 0     | 0     | 33KV VRS Food Ltd.     | Approved           | FY 2016-17       | 1                    | 18.57                    |
| 9       | 132KV Murtizapur SS                     | AMARAVATI  | 1              | 0     | 0     | Kanshivini             | Approved           | FY 2017-18       | 1                    | 18.57                    |
| 10      | 132KV Darwah                            | AMARAVATI  | 1              | 0     | 0     | 33KV yard (Darwha)     | Approved           | FY 2015-16       | 1                    | 18.57                    |

| Sr. No. | Name of the Scheme | Zone                    | Number of bays |          |          | Name of Feeder/bays | Status of Approval                | Year of Approval | No. of Bays Approved | Total Amount (Rs. Lakh)* |
|---------|--------------------|-------------------------|----------------|----------|----------|---------------------|-----------------------------------|------------------|----------------------|--------------------------|
|         |                    |                         | 33 kV          | 22 kV    | 11 kV    |                     |                                   |                  |                      |                          |
|         |                    | <b>Total No of Bays</b> | <b>15</b>      | <b>1</b> | <b>0</b> | <b>16</b>           | <b>Total Approved</b>             |                  | <b>15</b>            | <b>278.55</b>            |
|         |                    |                         |                |          |          |                     | <b>Total Approved (Rs. Crore)</b> |                  | <b>15</b>            | <b>2.79</b>              |

\* This is the gross capitalisation considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

#### 9. FY 2013-14 B – (Scheme approved in-principle during or before March 2011 for which there is negligible capitalization)

| Sr. No.      | Name of the Scheme   | Capitalisation (Rs. Crore)* | Status of Approval | Year of Approval |
|--------------|--|-----------------------------|--------------------|------------------|
| 1            | 1- Establishment of 132/33 kV substation at Rajur, Dist- Jalna<br>2- Establishment of 220/22 kV substation at Khudus, Dist- Thane<br>3- Establishment of 220/100 kV substation at Vasai, Dist- Thane | 0.11                        | Approval           | FY 2015-16       |
| 2            | Establishment of 400/220 kV Hinjewadi substation, Dist. Pune   | -                           | Disallowed         |                  |
| 3            | Establishment of 400/220 kV Kudus substation, dist. Thane  | 5.82                        | Approval           | FY 2017-18       |
| 4            | Evacuation of wind energy in Nasik & Karad Zone of MSETCL in part-I  | 6.81                        | Approval           | FY 2016-17       |
| <b>Total</b> |  | <b>12.74</b>                |                    |                  |

\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

### 10. FY 2013-14 C – (Negligible capitalization as per half yearly progress report)

| Sr. No.      | Name of the Scheme   | Capitalisation (Rs. Crore)* | Status of Approval | Year of Approval |
|--------------|--|-----------------------------|--------------------|------------------|
| 1            | Establishment of 220/33 KV substation with 2x25 MVA, 220/33 KV T/Fs at Bhalwani, Dist.-Solapur | 0.11                        | Approved           | FY 2015-16       |
| 2            | Installation of 125 MVAR, 400KV Bus shunt reactor bay at 400 kV Warora substation              | 9.53                        | Disallowed         |                  |
| 3            | Establishment of 132/33 KV Sub-station at Erandol, Dist. Jalgaon                               | 1.01                        | Approved           | FY 2017-18       |
| 4            | Establishment of 132/33 KV Sub-station at Bhusawal, Dist. - Jalgaon                            | 0.28                        | Approved           | FY 2016-17       |
| 5            | Establishment of 2X25 MVA, 132/33 kV substation at Rajur, Tal. Akole, Dist. Ahemadnagar        | 0.38                        | Approved           | FY 2016-17       |
| <b>Total</b> |  | <b>11.31</b>                |                    |                  |

\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

### 11. FY 2013-14 D – (DPR not submitted earlier)

| Sr. No.      | Name of the Scheme                     | Capitalisation (Rs. Crore)* | Status of Approval | Year of Approval |
|--------------|--|-----------------------------|--------------------|------------------|
| 1            | Rep. of equip. at 220KV Parli GCR      | 0.24                        | Approved           | FY 2015-16       |
| 2            | Aug. by replacement of T/F             | 0.90                        | Approved           | FY 2015-16       |
| 3            | Aug by replace/addition under NGP Zone | 0.88                        | Approved           | FY 2015-16       |
| 4            | Aug of ss under Nasik Zone             | -                           | Disallowed         |                  |
| 5            | Aug. of various ss under Nasik Zone by | -                           | Disallowed         |                  |
| 6            | REPLACEMENT OF T/Fs in PUNE            | -                           | Disallowed         |                  |
| 7            | 132KV Akola-I(Gorakshan Rd) SS         | 1.57                        | Approved           | FY 2015-16       |
|              | 132KV Jambazar SS                      |                             | Approved           | FY 2015-16       |
| <b>Total</b> |  | <b>3.59</b>                 |                    |                  |

*\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.*

## 12. FY 2013-14 E – (Part capitalization on account of land development, civil work etc.)

| Sr. No.      | Name of the Scheme   | Capitalisation<br>(Rs. Crore) * | Status of<br>Approval | Year of Approval |
|--------------|--|---------------------------------|-----------------------|------------------|
| 1            | Establishment of 220/132/33 KV s/s at Kopergoan District Ahmadnagar .                          | (0.08)                          | Approved              | FY 2015-16       |
| 2            | Establishment of 400/220 kV Kudus substation, dist. Thane                                      | 5.82                            | Approved              | FY 2019-20       |
| 3            | Establishment of 132/33 KV Sub-station at Pimpalgaon (Khadki), Tal.- Ambegaon, Dist. – Pune    | (0.06)                          | Approved              | FY 2015-16       |
| 4            | Establishment of 2 x 50 MVA, 132/33 KV Sub-station at Manegaon, Tal.- Sangola, Dist. – Solapur | 0.33                            | Approved              | FY 2016-17       |
| <b>Total</b> |  | <b>6.00</b>                     |                       |                  |

*\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.*

## 13. FY 2013-14 F – (Disallowed due to Cost over-run)

| Sr. No.      | Name of the Scheme  | Capitalisation<br>(Rs. Crore)* | Status of<br>Approval | Year of Approval |
|--------------|---|--------------------------------|-----------------------|------------------|
| 1            | Establishment of 132 KV Nivali in Latur District.                         | 2.14                           | Approved              | FY 2015-16       |
| 2            | Augmentation of T/F capacities in various EHV s/stns in Aurangabad Circle | 1.75                           | Approved              | FY 2015-16       |
| <b>Total</b> |   | <b>3.89</b>                    |                       |                  |

*\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.*

**14. FY 2014-15 : (Capitalisation claimed on utilisation of 33/22/11 kV Bays)**

| Sr.No.     | Name of the Scheme                                      | Zone   | Number of bays |       |       | Name of Feeder/bays  | Status of Approval         | Year of Approval | No. of Bays approved | Total Amount (Rs. Lakh)* |
|------------|---|--------|----------------|-------|-------|----------------------|----------------------------|------------------|----------------------|--------------------------|
|            |   |        | 33 kV          | 22 kV | 11 kV |                      |                            |                  |                      |                          |
| 1          | Estt. of 100KV Mumbra S/S                               | Vashi  | 0              | 3     | 0     | DAHISAR              | Approved                   | FY 2016-17       | 1                    | 18.57                    |
|            |   | Vashi  |                |       |       | UTTAR SHIV           | Approved                   | FY 2017-18       | 1                    | 18.57                    |
|            |   | Vashi  |                |       |       | KALYAN PHATA         | Approved                   | FY 2016-17       | 1                    | 18.57                    |
| 2          | Aug by replace of T/F under Kalwa Circle (for colrchem) | Vashi  | 0              | 4     | 0     | 22 kV Runwal City    | Approved                   | FY 2016-17       | 1                    | 18.57                    |
|            |   | Vashi  |                |       |       | 22 kV Rustomjee      | Approved                   | FY 2017-18       | 1                    | 18.57                    |
|            |   | Vashi  |                |       |       | 22 kV Tarangan-3     | Approved                   | FY 2017-18       | 1                    | 18.57                    |
|            |   | Vashi  |                |       |       | 22 kV Kailas Nagar   | Approved                   | FY 2017-18       | 1                    | 18.57                    |
| 3          | 100KV Ambernath-III                                     | Vashi  | 0              | 1     | 0     | 22 Kv Gaikwad Pada-1 | Approved                   | FY 2016-17       | 1                    | 18.57                    |
| 4          | 220KV Warora SS   | Nagpur | 1              | 0     | 0     | 33kV WPCL            | Approved                   | FY 2015-16       | 1                    | 18.57                    |
| 5          | Aug. by replacement of T/F ( Hinganghat)                | Nagpur | 1              | 0     | 0     | 33 KV Spintex        | Approved                   | FY 2016-17       | 1                    | 18.57                    |
| TOTAL Bays |   |        | 2              | 8     | 0     | 10                   | Total Approved             |                  | 10                   | 185.70                   |
|            |   |        |                |       |       |                      | Total Approved (Rs. Crore) |                  | 10                   | 1.86                     |

\* This is the gross capitalisation considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

**15. FY 2014-15 – (Capex schemes disallowed in FY 2014-15 in the MYT Order)**

| Sr. No. | Name of the Scheme                       | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|--|-----------------------------|--------------------|------------------|
| 1       | Evctn of Tarapur Extn                    | -                           | Approved           | FY 2015 - 16     |
| 2       | Evacuatin of power Uran CCCP             | -                           | Disallowed         |                  |
| 3       | Evacuation of Power generated by JSW     | 0.23                        | Approved           | FY 2015 - 16     |
| 4       | Estt. of 132kv level at 220kv Tilwani    | 0.08                        | Approved           | FY 2015 - 16     |
| 5       | 110KV Ln fr 220KV I'Karnji-110KV Kurndwd | -                           | Disallowed         |                  |
| 6       | 220KV Nagothane Wadkhal line             | -                           | Approved           | FY 2015 - 16     |
| 7       | 220KV Wathar SS                          | 0.33                        | Approved           | FY 2015 - 16     |
| 8       | 220KV Jath SS                            | 6.48                        | Approved           | FY 2015 - 16     |
| 9       | Estt. of 132KV Dapcheri S/S              | -                           | Disallowed         |                  |
| 10      | Estt. of 220 KV Palghar s/s              | -                           | Disallowed         |                  |
| 11      | 220 kV Ichalkaranji S/S                  | 0.16                        | Approved           | FY 2015 - 16     |
| 12      | Rplc of old BB prot scheme by Numeric BB | -                           | Approved           | FY 2015 - 16     |
| 13      | Rplc of old BB prot scheme by Numeric BB | -                           | Disallowed         |                  |
|         | <b>Total - A</b>                         | <b>7.28</b>                 |                    |                  |
| 14      | ABT Metering & VSAT Commn.               | -                           | Approved           | FY 2015 - 16     |
| 15      | ABT Metering & VSAT Commn.               | 0.52                        | Approved           | FY 2015 - 16     |
| 16      | ABT Metering & VSAT Commn.               | 0.31                        | Approved           | FY 2015 - 16     |
| 17      | ABT Metering System                      | 0.21                        | Approved           | FY 2015 - 16     |
| 18      | ABT Metering System                      | 0.01                        | Approved           | FY 2015 - 16     |
| 19      | ABT Metering System                      | -                           | Approved           | FY 2015 - 16     |
| 20      | ABT Metering System                      | 0.04                        | Approved           | FY 2015 - 16     |
| 21      | ABT Metering System                      | 0.09                        | Approved           | FY 2015 - 16     |
| 22      | LE-Repl. of old equip O&M Circle Panvel  | 0.32                        | Approved           | FY 2015 - 16     |
| 23      | LE-Repl. of equip 400KV RSO&M Dn Kalwa   | 0.09                        | Approved           | FY 2015 - 16     |
| 24      | 220KV Niwaliphata SS                     | 1.95                        | Approved           | FY 2015 - 16     |

| Sr. No. | Name of the Scheme                       | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|--|-----------------------------|--------------------|------------------|
| 25      | Estt. of 220KV Bapgaon S/S               | -                           | Disallowed         |                  |
| 26      | Estt. of 132kV Jawhar SS                 | -                           | Disallowed         |                  |
| 27      | 132KV Khanapur SS                        | -                           | Disallowed         |                  |
| 28      | 220KV Kondhwa (GIS)                      | 2.07                        | Approved           | FY 2015 - 16     |
| 29      | 220KV Gadchandur SS                      | 0.07                        | Approved           | FY 2015 - 16     |
| 30      | 132 KV Narsi                             | 0.01                        | Approved           | FY 2015 - 16     |
| 31      | 220 KV Khadki S/s & Parvati S/s          | 1.43                        | Approved           | FY 2015 - 16     |
| 32      | 220 KV BHOSARI & CHINCHWAD S/S           | 4.26                        | Approved           | FY 2015 - 16     |
| 33      | Replac. of ICT at 400kV Khadka-Bhusaval  | 4.54                        | Approved           | FY 2015 - 16     |
|         | <b>Total - B</b>                         | <b>15.92</b>                |                    |                  |
| 34      | PS to MHADA Colony at New C'pur, Ghugus  | -                           | Disallowed         |                  |
| 35      | Even of power-Gupta (GEPL) Usegaon,C'pur | -                           | Disallowed         |                  |
| 36      | Even-Urjankur Tatyasaheb, Kolhapur       | -                           | Disallowed         |                  |
| 37      | Rep. of equip. at 220KV Parli GCR        | -                           | Approved           | FY 2015 - 16     |
| 38      | Estt. of 132KV Bibvewadi                 | -                           | Disallowed         |                  |
| 39      | 220KV Rajgurunagar SS                    | -                           | Approved           | FY 2015 - 16     |
| 40      | 132KV Mahur                              | -                           | Disallowed         |                  |
| 41      | Estt. of 765KV at Koradi & Akola         | -                           | Disallowed         |                  |
| 42      | Estt. of 765KV at Koradi & Akola         | -                           | Disallowed         |                  |
| 43      | Estt. of 220 KV Viroda s/s               | -                           | Approved           | FY 2015 - 16     |
| 44      | 132kV Amdapur SS,Parbhani                | -                           | Disallowed         |                  |
| 45      | 220KV Nalasopara                         | -                           | Approved           | FY 2015 - 16     |
| 46      | 220KV Boisar-II                          | -                           | Approved           | FY 2015 - 16     |
| 47      | 132KV Indapur SS                         | 0.01                        | Approved           | FY 2015 - 16     |
| 48      | 132KV Akola-I(Gorakshan Rd) SS           | 0.04                        | Approved           | FY 2015 - 16     |
| 49      | 132KV Ahmedpur                           | -                           | Disallowed         |                  |
| 50      | 220 KV Khopoli                           | 0.06                        | Approved           | FY 2015 - 16     |

| Sr. No. | Name of the Scheme  | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|---|-----------------------------|--------------------|------------------|
| 51      | 220KV Sunflag SS  | 0.00                        | Approved           | FY 2015 - 16     |
| 52      | 110KV Chambukhadi SS  | 1.81                        | Approved           | FY 2015 - 16     |
| 53      | 132KV Jambazar SS   | 0.05                        | Approved           | FY 2015 - 16     |
| 54      | 132KV Yavat SS  | 0.24                        | Approved           | FY 2015 - 16     |
| 55      | Aug of ss under Nasik Zone  | -                           | Disallowed         |                  |
| 57      | REPLACEMENT OF T/Fs in PUNE   | -                           | Disallowed         |                  |
| 58      | Aug. by replacement of T/F  | 1.08                        | Approved           | FY 2015 - 16     |
| 59      | Aug by replace/addition under NGP Zone  | 0.60                        | Approved           | FY 2015 - 16     |
| 56      | Aug. of various ss under Nasik Zone by  | -                           | Disallowed         |                  |
| 60      | 1 × 50 MVA, 220/33 KV transformer at 220 KV Raymond substation                                    | -                           | Disallowed         |                  |
| 61      | 1 × 200 MVA, 220/132 KV transformer at 220 KV Satana substation                                   | -                           | Disallowed         |                  |
| 62      | Replacement of 2 x 25MVA , 132/33kV by 2 x 50 MVA ,132/33kV power transformers at 132kV Pahur S/s | -                           | Approved           | FY 2015 - 16     |
|         | <b>Total - C</b>  | <b>3.89</b>                 |                    |                  |
| 185     | Repl of condr for 220kv lamboli-bale ln   | 0.14                        | Approved           | FY 2015 - 16     |
| 186     | 100KV Bapgaon-Bhiwandi Link Line  | -                           | Approved           | FY 2015 - 16     |
| 187     | 132KV Ambad - 220KV Jalna SCDC Line   | -                           | Approved           | FY 2015 - 16     |
| 188     | 220KV Vita-Pandharpur-Lamboti LL  | -                           | Approved           | FY 2015 - 16     |
| 189     | 220KV Miraj-Ichalkaranji LL   | -                           | Approved           | FY 2015 - 16     |
| 190     | 132KV Shrigonda-Bhose LL  | -                           | Approved           | FY 2015 - 16     |
| 191     | 132KV Sinner-Sangamner LL   | -                           | Approved           | FY 2015 - 16     |
| 192     | 132KV Butibori-Khapri LL  | -                           | Approved           | FY 2015 - 16     |
| 193     | 132KV Saoner-Katol LL   | -                           | Approved           | FY 2015 - 16     |
| 194     | 132KV Bhandara-Kardha LL  | -                           | Approved           | FY 2015 - 16     |
| 195     | 132KV Sakoli-Kaulewada LL   | -                           | Approved           | FY 2015 - 16     |
| 196     | 132KV Nagpur-I - Nagpur-II LL   | -                           | Approved           | FY 2015 - 16     |
| 197     | 132KV Nagpur-II-Kanhan LL   | -                           | Approved           | FY 2015 - 16     |



| Sr. No. | Name of the Scheme                       | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|--|-----------------------------|--------------------|------------------|
| 198     | 220KV Virur-Ashti LL                     | -                           | Approved           | FY 2015 - 16     |
| 199     | 220KV Wani-Warora LL                     | -                           | Approved           | FY 2015 - 16     |
| 200     | 220KV Wardha-I-Yavatmal LL               | -                           | Approved           | FY 2015 - 16     |
| 201     | 220KV Amravati-Ambazari LL               | -                           | Approved           | FY 2015 - 16     |
| 202     | 220KV C'pur MIDC-C'pur-I LL              | -                           | Approved           | FY 2015 - 16     |
| 203     | 220KV C'pur MIDC-Gadchandur LL           | -                           | Approved           | FY 2015 - 16     |
| 204     | 132KV Parli-Parbhani for Gangakhed       | 5.39                        | Approved           | FY 2015 - 16     |
| 205     | 132 KV Pardi - Sahuli SC/DC Line         | -                           | Approved           | FY 2015 - 16     |
| 206     | 132KV Shelu SS                           | -                           | Disallowed         |                  |
| 207     | 132KV Barshi-Takli SS                    | -                           | Disallowed         |                  |
| 208     | 220KV Sangli SS                          | -                           | Approved           | FY 2015 - 16     |
| 209     | 132KV Tumsar SS                          | -                           | Approved           | FY 2015 - 16     |
| 210     | 132KV Alapalli SS                        | -                           | Approved           | FY 2015 - 16     |
| 211     | 132KV Sahuli SS                          | -                           | Approved           | FY 2015 - 16     |
| 212     | 220 KV Narsi                             | -                           | Disallowed         |                  |
| 213     | 220 KV Pachod                            | -                           | Approved           | FY 2015 - 16     |
| 214     | Estt. of 220KV Dapcheri S/S              | -                           | Approved           | FY 2015 - 16     |
| 215     | 220KV Kondhwa SS                         | -                           | Approved           | FY 2015 - 16     |
| 216     | Estt. of 220KV Bhiwandi-IV -Rajlaxmi S/S | -                           | Approved           | FY 2015 - 16     |
| 217     | Estt. 100kV Agardanda SS                 | -                           | Approved           | FY 2015 - 16     |
| 218     | Estt. 132KV Kothali(Nagardeola) SS       | 0.09                        | Approved           | FY 2015 - 16     |
| 219     | 132KV Waghluj dhanora (Ashti-II) SS      | -                           | Approved           | FY 2015 - 16     |
| 220     | Estt. of 220 KV EON KHARADI s/s          | -                           | Approved           | FY 2015 - 16     |
| 221     | 132kV Bhugaon, Mulshi,Pune               | -                           | Approved           | FY 2015 - 16     |
| 222     | Addnl T/F O&M Cr Pune (77/18.1.07)       | 1.96                        | Approved           | FY 2015 - 16     |
| 223     | 110KV Atit                               | 1.95                        | Approved           | FY 2015 - 16     |
| 224     | 132KV Karangi-Akkalkot LL                | -                           | Approved           | FY 2015 - 16     |

| Sr. No. | Name of the Scheme                       | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|--|-----------------------------|--------------------|------------------|
|         | Total - D                                | 9.53                        |                    |                  |
| 226     | Line Works in Nagpur Zone                | -                           | Approved           | FY 2015 - 16     |
| 227     | Link Lines under Nagpur Zone             | -                           | Approved           | FY 2015 - 16     |
| 228     | 220KV Pargaon SS                         | 0.51                        | Approved           | FY 2017 - 18     |
| 229     | 220KV Mudshingi SS                       | 0.09                        | Approved           | FY 2015 - 16     |
|         | <b>Total - E</b>                         | <b>0.60</b>                 |                    |                  |
| 230     | 220KV Ghatodi-Wani LL                    | -                           | Approved           | FY 2015 - 16     |
| 231     | 132kV Dhanki SS,Yavatmal                 | -                           | Disallowed         |                  |
| 232     | 132KV Narsi-Mukhed SCDC Line             | -                           | Disallowed         |                  |
|         | <b>Total - F</b>                         | <b>-</b>                    |                    |                  |
| 233     | Bhokar Pada (ORC)                        | -                           | Disallowed         |                  |
| 234     | Line diversion for WCL Bhatadi (ORC)     | -                           | Disallowed         |                  |
| 235     | 33KV Electrode line diversion for WCL (  | -                           | Disallowed         |                  |
| 236     | ORC work for water pumping scheme,Ambad  | -                           | Disallowed         |                  |
| 237     | ORC work for M/s Perkins India Pvt Ltd   | -                           | Disallowed         |                  |
| 238     | EHV line shifting under EHV OM Cir NASIK | -                           | Disallowed         |                  |
| 239     | ORC-33KV Express FDR Ujani canal Barshi  | -                           | Disallowed         |                  |
| 240     | 132 kV PS to Daund TSS & Yawat TSS, Pune | -                           | Disallowed         |                  |
| 241     | ORC-Increase height 400Kv line for RVNL  | -                           | Disallowed         |                  |
| 242     | Divr'n 400KV S/C Loni'd-Kalwa-Padghe lin | -                           | Disallowed         |                  |
| 243     | 2X22kV bay220kV Chinchwad for M/S PCNDTA | -                           | Disallowed         |                  |
| 244     | ORC- 33KV Express FDR Ujani canal Puluj  | -                           | Disallowed         |                  |
| 245     | Height raising of 66KV Tumsar-Madgi line | -                           | Disallowed         |                  |
| 246     | D/E 220KV CT Breaker,Iso @ 220KV Uran    | -                           | Disallowed         |                  |
| 247     | 220KV Tembhu LIS                         | -                           | Disallowed         |                  |
| 248     | 220KV Matradevi(Ghugus)                  | -                           | Disallowed         |                  |
|         | <b>Total - G</b>                         | <b>-</b>                    |                    |                  |

| Sr. No. | Name of the Scheme  | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|---|-----------------------------|--------------------|------------------|
| 249     | 132 KV Nanduri  | -                           | Approved           | FY 2015 - 16     |
| 250     | Trf., Aug In Tr.O& M Karad Zone   | 0.09                        | Approved           | FY 2015 - 16     |
| 251     | 110KV Kundal SS   | 0.07                        | Approved           | FY 2015 - 16     |
| 252     | Replacement of T/Fs under Nagpur Zone.  | -                           | Approved           | FY 2015 - 16     |
| 253     | 132KV Manmad SS   | -                           | Approved           | FY 2015 - 16     |
|         | <b>Total - H</b>  | <b>0.16</b>                 |                    |                  |
| 254     | 220Kv Nandgaon Peth - Warud DC Line   | -                           | Disallowed         |                  |
| 255     | 220Kv Nandgaon Peth - Anjangaon DC Line   | -                           | Disallowed         |                  |
| 256     | 220KV S/Stn.Shenda Park 2019-20   | -                           | Disallowed         |                  |
| 257     | CONVERSION OF EXISTING 132 kV KALE(T) - 220 KV WATHAR LINE TO DC USING SAME ROW - 35 KM. CONVERSION OF SC TO DC.            | -                           | Disallowed         |                  |
| 258     | 132 KV Deoli end bay & 132 KV Seloo end bay at 220/132 KV Bhugaon (Wardha-II) s/stn   | -                           | Disallowed         |                  |
| 259     | 132 KV Bhugaon (Wardha-II) bay at 132/33 KV Deoli S/stn   | -                           | Disallowed         |                  |
| 260     | Establishment of 220KV Nagpur Ringmain by U/G cable   | -                           | Disallowed         |                  |
| 261     | S/C to D/C conversion of Chinchwad-Nagar- Narayangaon   | -                           | Disallowed         |                  |
| 262     | LILO on 132 kV Chinchwad Ganeshkhind line & 2 no.feeder bay at 132 kV Rahatani SS   | -                           | Disallowed         |                  |
| 263     | 2ND CIRCUIT STRINGING FROM 220 KV JEUR -PAREWADI LINE - 22 KM   | -                           | Disallowed         |                  |
| 264     | Replacement of conductor 132 kV Boisar-II-Lupin- MIDC Line  | -                           | Disallowed         |                  |
| 265     | Replacement of conductor 100 kV DC Line from 220 kV Padghe to 100 kV Bhiwandi High Ampacity.                                | -                           | Disallowed         |                  |
| 266     | Replacement of Insulator strings of 400 kV Dhule-SSNNL Ckt-I&II by long rod porcelen insulator from loc no. 189-364 (69 KM) | -                           | Disallowed         |                  |
|         | <b>Total - I</b>  | <b>-</b>                    |                    |                  |
| 267     | 220KV LILO on Kanhan-Umred Ln   | -                           | Approved           | FY 2015 - 16     |

| Sr. No. | Name of the Scheme                      | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|---|-----------------------------|--------------------|------------------|
| 268     | 132KV Gangapur-Vaijapur SCDC Line       | 0.12                        | Approved           | FY 2015 - 16     |
| 269     | 220KV Vairag (Rev 2013-14)              | 0.89                        | Approved           | FY 2016 - 17     |
| 270     | 220KV Mukhai                            | -                           | Disallowed         |                  |
| 271     | 220KV Parvati SS                        | 0.12                        | Approved           | FY 2015 - 16     |
|         | <b>Total - J</b>                        | <b>1.13</b>                 |                    |                  |
| 272     | 80MVAR Reactor at 400KV Karad           | -                           | Approved           | FY 2015 - 16     |
| 273     | Evsn of Wind Energy in Nasik/Karad Zone | -                           | Approved           | FY 2015 - 16     |
| 274     | Providing shunt capacitor in var. Zones | -                           | Approved           | FY 2015 - 16     |
| 275     | Providing shunt capacitor in var. Zones | 0.43                        | Approved           | FY 2015 - 16     |
| 276     | Providing shunt capacitor in var. Zones | 0.02                        | Approved           | FY 2015 - 16     |
| 277     | Providing shunt capacitor in var. Zones | -                           | Approved           | FY 2015 - 16     |
| 278     | 125MVAR bus shunt reactor bay at Warora | -                           | Disallowed         |                  |
| 279     | Buscond repl at Padgha s/s              | 1.04                        | Approved           | FY 2015 - 16     |
| 280     | 220KV Lns for 400KV PGCIL SS            | -                           | Approved           | FY 2015 - 16     |
| 281     | Estt. of 220KV Vasai S/S                | -                           | Approved           | FY 2015 - 16     |
| 282     | 132KV Jam SS                            | 26.12                       | Approved           | FY 2015 - 16     |
| 283     | Estt. of 220KV Kudus S/S (Wada-II)      | 0.79                        | Approved           | FY 2015 - 16     |
| 284     | 132 KV Rajur SS- (Aurangabad)           | 0.01                        | Approved           | FY 2015 - 16     |
| 285     | 400KV Nanded                            | -                           | Approved           | FY 2015 - 16     |
| 286     | Estt. of 100KV Mumbra S/S               | 2.34                        | Approved           | FY 2015 - 16     |
| 287     | Estt. of 400KV Kudus S/S                | 1.43                        | Approved           | FY 2019 - 20     |
| 288     | Estt. of 400KV Kudus S/S                | -                           | Approved           | FY 2017 - 18     |
| 289     | 400KV Hinjewadi SS (not to use)         | -                           | Disallowed         |                  |
| 290     | Estt. 132KV Karkee SS                   | -                           | Disallowed         |                  |
| 291     | Estt. of 220 KV Bhalavani S/S           | 2.54                        | Approved           | FY 2015 - 16     |
| 292     | 400KV Hinjewadi GIS SS                  | -                           | Disallowed         |                  |
| 293     | 132KV Dharni SS                         | -                           | Approved           | FY 2015 - 16     |

| Sr. No. | Name of the Scheme                               | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|--|-----------------------------|--------------------|------------------|
| 294     | Estt. of 220 KV MALIKPETH s/s                    | -                           | Disallowed         |                  |
| 295     | Estt. 132KV at Bhusawal SS                       | -                           | Approved           | FY 2016 - 17     |
| 296     | Estt. 132KV at Arni substation                   | -                           | Approved           | FY 2015 - 16     |
| 297     | 220KV Sangli SS                                  | -                           | Disallowed         |                  |
| 298     | 132 KV Mhaswad SS                                | -                           | Disallowed         |                  |
| 299     | 220kV Kudus/Wada-II/Bhaveghar S/S-Mod            | 3.10                        | Approved           | FY 2015 - 16     |
| 300     | 33kV at 400kV Hinjewadi GIS SS                   | -                           | Disallowed         |                  |
| 301     | 220kV Nandgaonpeth (MIDC),AMT                    | -                           | Disallowed         |                  |
| 302     | 220KV Apta                                       | -                           | Approved           | FY 2015 - 16     |
| 303     | 220 KV Mahad                                     | -                           | Approved           | FY 2015 - 16     |
| 304     | 220 KV Ambernath-III                             | 0.04                        | Approved           | FY 2015 - 16     |
| 305     | 100 KV Patalganga                                | -                           | Approved           | FY 2015 - 16     |
| 306     | Aug. of 400KV Kalwa S/S                          | 0.01                        | Approved           | FY 2015 - 16     |
| 307     | Aug of S/S under Karad Circle                    | -                           | Approved           | FY 2015 - 16     |
| 308     | 220KV Kandalgaon                                 | -                           | Approved           | FY 2015 - 16     |
| 309     | 2nd Ckt. Stringing of 220 KV Miraj- Tilwani Line | -                           | Approved           | FY 2015 - 16     |
| 310     | 132 KV Rajur SS                                  | -                           | Approved           | FY 2015 - 16     |
| 311     | Estt. 132KV at Erandol s/s                       | -                           | Approved           | FY 2015 - 16     |
| 312     | 400KV Jejuri-Winjhar DC Ln                       | -                           | Disallowed         |                  |
|         | <b>Total - K</b>                                 | <b>37.87</b>                |                    |                  |
| 313     | Proc & Instl of 420 Reactor-Padge/Khrgr          | -                           | Approved           | FY 2015 - 16     |
| 314     | PLCC Commn. N/wk of Data & Voice                 | -                           | Approved           | FY 2015 - 16     |
| 315     | PLCC Commn. N/wk of Data & Voice                 | -                           | Approved           | FY 2015 - 16     |
| 316     | Supply & Retrofit of old protn schemes           | -                           | Approved           | FY 2015 - 16     |
| 317     | Supply & Retrofit of old protn schemes           | -                           | Disallowed         |                  |
| 318     | Supply & Retrofit of old protn schemes           | -                           | Disallowed         |                  |
| 319     | Shunt Reactor 400kV Kolhapur(Talandge)           | -                           | Approved           | FY 2015 - 16     |

| Sr. No. | Name of the Scheme                       | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|--|-----------------------------|--------------------|------------------|
| 320     | 400KV Bhusawal-II SS                     | -                           | Approved           | FY 2015 - 16     |
| 321     | LE Schems For Babhaleshwar Dn            | -                           | Approved           | FY 2015 - 16     |
| 322     | LE at O&M Dn. Nasik                      | -                           | Approved           | FY 2015 - 16     |
| 323     | 132Kv Wai - Lonand Line                  | -                           | Approved           | FY 2015 - 16     |
| 324     | 132KV Chinchwad-Markal LL                | -                           | Approved           | FY 2015 - 16     |
| 325     | 132KV Phursungi-Theur LL                 | -                           | Approved           | FY 2015 - 16     |
| 326     | 220KV Solapur-Karkamb LL                 | -                           | Approved           | FY 2015 - 16     |
| 327     | 132KV Phaltan-Walchandnagar LL           | -                           | Approved           | FY 2015 - 16     |
| 328     | 132KV Shirpur from 220KV Dondaicha Ln    | -                           | Approved           | FY 2015 - 16     |
| 329     | 132kv DCDC Daund-Shrigonda Ln            | -                           | Approved           | FY 2018 - 19     |
| 330     | 220KV Amalner SS                         | -                           | Approved           | FY 2015 - 16     |
| 331     | 220KV Alephata                           | -                           | Approved           | FY 2015 - 16     |
| 332     | Contrld shunt reactor(CSR) 400KV DhuleSS | -                           | Approved           | FY 2015 - 16     |
| 333     | 132KV Lendra GIS SS                      | -                           | Approved           | FY 2015 - 16     |
| 334     | 132KV Pathra                             | -                           | Approved           | FY 2015 - 16     |
| 335     | Estt. 132KV Bhuyar SS                    | -                           | Approved           | FY 2015 - 16     |
| 336     | Estt. 132KV Kothali(Nagardeola) SS       | -                           | Approved           | FY 2015 - 16     |
| 337     | 132 KV Pokharni SS                       | -                           | Approved           | FY 2015 - 16     |
| 338     | Inst & Repl 220/22/22kV Hinjewadi-II     | -                           | Disallowed         |                  |
| 339     | Augmentation Schemes under Nagpur Zone   | -                           | Approved           | FY 2015 - 16     |
| 340     | 220KV Butibori SS                        | -                           | Approved           | FY 2015 - 16     |
| 341     | 132Kv Chakur                             | -                           | Approved           | FY 2015 - 16     |
| 342     | 220KV Bhiwandi-II                        | -                           | Approved           | FY 2015 - 16     |
| 343     | 400KV Parli SS                           | -                           | Approved           | FY 2015 - 16     |
| 344     | 400KV Aurangabad (Waluj)                 | -                           | Approved           | FY 2015 - 16     |
| 345     | 110KV Ichalkaranji SS                    | -                           | Approved           | FY 2015 - 16     |
| 346     | 220KV Jejuri                             | -                           | Approved           | FY 2015 - 16     |

| Sr. No. | Name of the Scheme   | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|--|-----------------------------|--------------------|------------------|
| 347     | 100KV Ganeshkhind  | -                           | Approved           | FY 2015 - 16     |
| 348     | 132KV Kamthadi SS  | -                           | Approved           | FY 2015 - 16     |
| 349     | 100 KV Ambernath -JBIC   | -                           | Approved           | FY 2015 - 16     |
| 350     | 100 KV Thal Waishet-JBIC   | -                           | Approved           | FY 2015 - 16     |
| 351     | 100KV Tambati  | -                           | Approved           | FY 2015 - 16     |
| 352     | 220KV Chikhali SS  | -                           | Approved           | FY 2015 - 16     |
| 353     | 132KV Anjangaon SS   | -                           | Approved           | FY 2015 - 16     |
| 354     | 132KV Morshi SS  | -                           | Approved           | FY 2015 - 16     |
| 355     | 132KV Umerkhed-Gunj LL   | -                           | Approved           | FY 2015 - 16     |
| 356     | 132KV Soyegaon-Pahur Line  | -                           | Approved           | FY 2015 - 16     |
| 357     | 132KV Badnapur   | -                           | Approved           | FY 2015 - 16     |
| 358     | v) 220KV Butibori III  | -                           | Approved           | FY 2015 - 16     |
| 359     | 220 kV LINK LINES CONNECTING THE SUBSTATIONS ON NAGPUR RING MAIN, viz.   | -                           | Approved           | FY 2015 - 16     |
| 360     | i) 220KV Khaperkheda-Uppalwadi(U/G :13.6 ckm, O/H : 8.6ckm) (Proposed in 2018-19)  | -                           | Approved           | FY 2015 - 16     |
| 361     | iv) 220 kV NEW PARDI -BUTTIBORI III D/C LINE ((To be revised beyond 2020-21) 1) M/C LINE FROM PARDI TO LOC NO 68 OF EX 132 kV LINE | -                           | Approved           | FY 2015 - 16     |
| 362     | v)220KV Butibori -Ambazari line- only stringing  | -                           | Approved           | FY 2015 - 16     |
| 363     | vi) 220KV Butibori I- Butibori III   | -                           | Approved           | FY 2015 - 16     |
| 364     | vii)LILO on Khaperkheda - Wardha   | -                           | Approved           | FY 2015 - 16     |
| 365     | 220KV Kalwan SS  | -                           | Approved           | FY 2017 - 18     |
| 366     | Diversion of 220kV M/C line for Baramati Medical college and hospital through underground cable(Civil+Elect)                       | -                           | Approved           | FY 2015 - 16     |
| 367     | 220 kV Goregaon film city (2018-19)  | -                           | Disallowed         |                  |
| 368     | 220KV Ulwe- Node   | -                           | Disallowed         |                  |
| 369     | 220KV Khandeshwar S/S (Panvel)   | -                           | Disallowed         |                  |

| Sr. No. | Name of the Scheme                       | Capitalisation (Rs. Crore)* | Status of Approval | Year of Shifting |
|---------|--|-----------------------------|--------------------|------------------|
| 370     | Rplc of old BB prot scheme by Numeric BB | -                           | Disallowed         |                  |
| 371     | Rplc of old BB prot scheme by Numeric BB | -                           | Disallowed         |                  |
| 372     | Rplc of old BB prot scheme by Numeric BB | -                           | Disallowed         |                  |
| 373     | T/F aug. at 220 KV Sub station Raymond   | -                           | Disallowed         |                  |
| 374     | Rplc of old BB prot scheme by Numeric BB | -                           | Disallowed         |                  |
| 375     | 132KV Yavat SS                           | -                           | Approved           | FY 2015 - 16     |
|         | <b>Total - L</b>                         | -                           |                    |                  |
|         | <b>Grand Total</b>                       | <b>76.38</b>                |                    |                  |

\* This is the gross capitalisation as claimed by MSETCL and considered for analysis by the Commission. However, the Commission has approved the net capitalisation as discussed in the relevant Section of the Order.

**Summary of computation of previously disallowed capitalisation (for years FY 2010-11 to FY 2014-15) on Net Capitalisation (depreciated cost) basis, considered for approval in this Order:**

| (Rs. Crore)   |               |              |              |            |             |
|---|---------------|--------------|--------------|------------|-------------|
| Particulars   | FY 2015-16    | FY 2016-17   | FY 2017-18   | FY 2018-19 | FY 2019-20  |
| Year-Wise Capitalisation considered for analysis              | 123.57        | 26.84        | 19.32        | -          | 7.29        |
| Accumulated Depreciation Till Year of Approved Capitalisation | 8.37          | 3.81         | 3.23         | -          | 1.62        |
| <b>Net Asset Value approved</b>                               | <b>115.21</b> | <b>23.03</b> | <b>16.09</b> | <b>-</b>   | <b>5.67</b> |



### Appendix – 5

#### **List of Capex schemes against which capitalisation is claimed by MSETCL in FY 2015-16 to FY 2019-20 and considered for analysis and approval**

| Sr. No | Project Definition | Scheme Name                              | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 1      | SS/2008-09/060     | 220KV Deogaon-Rangari                    | 16.79                       | 4.23       | 9.18       | -          | -          | Approved                          |
| 2      | SS/2008-09/061     | 220KV Tuljapur                           | 17.92                       | 3.90       | 1.26       | -          | -          | Approved                          |
| 3      | LL/2010-11/016     | 220KV Malegaon-Kalwan DC Ln              | -                           | -          | 36.28      | 7.91       | -          | Approved                          |
| 4      | LL/2010-11/011     | 132 KV Pardi - Sahuli SC/DC Line         | -                           | -          | -          | -          | -          | Approved                          |
| 5      | LL/2010-11/013     | 132KV Kalwan-Satana Line                 | (0.01)                      | (0.17)     | -          | -          | -          | Approved                          |
| 6      | SS/2008-09/062     | 220KV Bhokar                             | 19.90                       | 5.22       | -          | 0.08       | -          | Approved                          |
| 7      | SS/2008-09/044     | 220KV Bhose (Belwandi) SS                | 1.62                        | 2.64       | -          | -          | -          | Approved                          |
| 8      | LL/2008-09/077     | 132KV Shrigonda-Bhose LL                 | 0.06                        | -          | -          | -          | -          | Approved                          |
| 9      | SS/2011-12/001     | Estt. of 220 KV Sakri (Shivajinagar) s/s | 1.55                        | 2.68       | 3.43       | -          | -          | Approved                          |
| 10     | SS/2008-09/028     | 220KV Malegaon SS                        | 0.08                        | -          | 91.35      | -          | -          | Approved                          |
| 11     | SS/2008-09/030     | 220KV Anjangaon SS                       | -                           | 10.39      | 63.26      | -          | -          | Approved                          |
| 12     | SS/2008-09/069     | 220 KV Krishnoor                         | -                           | -          | 12.78      | 10.00      | -          | Approved                          |
| 13     | LL/2008-09/085     | 220KV Bhusawal-Chalisgaon LL             | 88.91                       | 3.53       | 0.28       | -          | -          | Approved                          |
| 14     | LL/2008-09/086     | 220KV Chalisgaon-                        | 0.06                        | (0.02)     | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                               | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|---|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | Bab'war LL                                |                             |            |            |            |            |                                   |
| 15     | SS/2008-09/042     | 220KV Sayane SS                           | 31.07                       | 4.37       | 0.49       | -          | -          | Approved                          |
| 16     | SS/2008-09/007     | 220KV South Solapur                       | 1.04                        | 0.23       | -          | -          | -          | Approved                          |
| 17     | SS/2008-09/067     | 220 KV Phulambri                          | 16.59                       | 9.43       | 4.97       | -          | -          | Approved                          |
| 18     | SS/2008-09/029     | 220KV Nandgaon-Peth SS                    | 52.35                       | 6.15       | 5.62       | -          | -          | Approved                          |
| 19     | SS/2008-09/066     | 132 KV Sonpeth                            | 1.15                        | 0.59       | -          | -          | -          | Approved                          |
| 20     | SS/2008-09/053     | 132KV Pulgaon SS                          | 0.06                        | 11.95      | -          | -          | -          | Approved                          |
| 21     | SS/2008-09/024     | 220KV Yewalewadi SS --- VSNL              | 0.05                        | 1.01       | (0.01)     | -          | -          | Approved                          |
| 22     | SS/2008-09/058     | 220KV Ballarshah SS                       | -                           | 44.74      | 5.12       | -          | -          | Approved                          |
| 23     | SS/2008-09/021     | 220KV Kagal (Hamidwada) SS                | 0.87                        | -          | 0.22       | -          | -          | Approved                          |
| 24     | SS/2008-09/019     | 220KV Mudhaltitta (Bidri) SS              | 6.57                        | 0.98       | 3.03       | -          | -          | Approved                          |
| 25     | LL/2008-09/111     | 220KV Wardha-II-Warora LL                 | -                           | 6.46       | 77.11      | -          | -          | Approved                          |
| 26     | LL/2010-11/007     | 220KV Ghatodi(Pusad)-Hingoli LL           | 38.14                       | 5.12       | 0.87       | -          | -          | Approved                          |
| 27     | SS/2008-09/057     | 220KV Tadali SS                           | 5.21                        | 4.05       | -          | -          | -          | Approved                          |
| 28     | SS/2008-09/022     | 220KV Bhosari (Akurdi) SS                 | 0.13                        | 0.63       | 0.17       | -          | -          | Approved                          |
| 29     | LL/2008-09/053     | 220KV Solapur (400 KV Lamboti)-Karkamb LL | -                           | -          | -          | -          | -          | Approved                          |
| 30     | SS/2008-09/035     | 132KV Jalgaon-Jamod SS                    | -                           | 35.44      | 20.19      | -          | -          | Approved                          |
| 31     | SS/2008-09/065     | 132 KV Shengaon                           | -                           | -          | 29.71      | -          | -          | Approved                          |
| 32     | SS/2008-09/005     | 132KV Waghdari                            | 22.03                       | 2.86       | 0.16       | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                           | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|---------------------------------------|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |                                       | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 33     | LL/2008-09/001     | 220KV Khandalgaon-Dasturi Link Line   | -                           | -          | -          | -          | 29.48      | Approved                          |
| 34     | SS/2008-09/039     | 132KV Vadjire SS                      | -                           | -          | -          | 24.00      | 10.00      | Approved                          |
| 35     | SS/2008-09/054     | 132KV Sahuli SS                       | -                           | -          | -          | -          | -          | Approved                          |
| 36     | SS/2008-09/059     | 132KV Soygaon                         | 3.03                        | 0.81       | 0.18       | -          | -          | Approved                          |
| 37     | SS/2008-09/034     | 132KV Deolgaon Raja SS                | 0.17                        | 29.36      | 5.45       | -          | -          | Approved                          |
| 38     | SS/2008-09/025     | 132KV Karajgi SS                      | 4.46                        | 0.11       | 0.01       | 0.30       | -          | Approved                          |
| 39     | SS/2008-09/048     | 132KV Morgaon-Arjuni SS               | -                           | -          | -          | 10.00      | -          | Approved                          |
| 40     | SS/2008-09/032     | 132 kV Yavatmal MIDC                  | -                           | 23.02      | 2.97       | -          | -          | Approved                          |
| 41     | SS/2008-09/045     | 132KV Ghargaon SS                     | -                           | -          | -          | 14.00      | -          | Approved                          |
| 42     | LL/2008-09/057     | 132KV Khaparale-Sangamner LL          | 1.48                        | 3.41       | 0.97       | -          | -          | Approved                          |
| 43     | LL/2008-09/058     | 132KV Akole-Sangamner LL              | 0.01                        | (0.05)     | -          | -          | -          | Approved                          |
| 44     | SS/2008-09/071     | 132KV Pangri                          | 0.12                        | 1.98       | -          | -          | -          | Approved                          |
| 45     | SS/2008-09/006     | Estt. of 132KV Soregaon               | 0.71                        | 0.01       | -          | -          | -          | Approved                          |
| 46     | LL/2010-11/008     | 220KV Akola(Apatapa)-Balapur(MIDC) LL | 1.42                        | 1.16       | -          | -          | -          | Approved                          |
| 47     | SS/2008-09/047     | 132KV Seloo SS                        | 6.45                        | 0.55       | -          | -          | -          | Approved                          |
| 48     | LL/2008-09/088     | 132KV Kardha-Asangaon LL              | 1.24                        | -          | -          | -          | -          | Approved                          |
| 49     | LL/2008-09/059     | 132KV Dondaicha-Shirpur LL            | -                           | 0.93       | 24.27      | -          | -          | Approved                          |
| 50     | LL/2008-09/094     | 132KV Sindewahi-Bramhapuri LL         | -                           | -          | -          | 0.58       | 0.06       | Approved                          |
| 51     | LL/2008-09/137     | 132KV Shirpur from                    | -                           | -          | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                              | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | 220KV Dondaicha Ln                       |                             |            |            |            |            |                                   |
| 52     | LL/2008-09/065     | 220KV K'pur-Sawantwadi LL                | 0.20                        | 0.75       | 0.45       | -          | -          | Approved                          |
| 53     | LL/2008-09/021     | 132KV LL from 132KV Kalamb-220KV Paranda | 0.70                        | 0.42       | -          | -          | -          | Approved                          |
| 54     | LL/2008-09/030     | 132KV Washim-Jambazar LL                 | 2.56                        | 0.36       | -          | -          | -          | Approved                          |
| 55     | LL/2008-09/090     | 132KV Kalmeshwar-Hingna LL               | -                           | -          | -          | 3.15       | 0.35       | Approved                          |
| 56     | LL/2008-09/007     | 132KV Gangapur-Vaijapur SCDC Line        | 0.63                        | 0.24       | -          | -          | -          | Approved                          |
| 57     | LL/2008-09/019     | 132KV Parli-Parbhani for Gangakhed       | 0.99                        | 0.49       | -          | -          | -          | Approved                          |
| 58     | LL/2008-09/035     | 132KV Dusarbid-Mantha LL                 | 4.30                        | 2.27       | 0.60       | -          | -          | Approved                          |
| 59     | LL/2008-09/060     | 132KV Phaltan-Walchandnagar LL           | -                           | -          | -          | -          | -          | Approved                          |
| 60     | LL/2008-09/033     | 132KV Daryapur-Anjangaon LL              | 0.10                        | 0.01       | 0.11       | -          | -          | Approved                          |
| 61     | LL/2008-09/044     | 132KV Chinchwad-Markal LL                | 0.48                        | -          | -          | -          | -          | Approved                          |
| 62     | LL/2008-09/032     | 132KV Digras-Darwah LL                   | 0.21                        | 0.11       | -          | -          | -          | Approved                          |
| 63     | LL/2008-09/017     | 132KV Ahmedpur-Chakur SCDC Line          | 12.92                       | 0.93       | -          | -          | -          | Approved                          |
| 64     | LL/2008-09/072     | 110KV Chambukhadi-Kale                   | -                           | 13.22      | 2.59       | -          | -          | Approved                          |
| 65     | LL/2008-09/012     | 132KV Nilanga-Umerga SCDC Line           | 0.92                        | 0.11       | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                              | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 66     | LL/2008-09/043     | 132KV Karanjgi-Mandrup LL                | 0.48                        | -          | -          | -          | -          | Approved                          |
| 67     | LL/2008-09/018     | 132KV Purna-Basmath SCDC Line            | 0.25                        | 0.30       | -          | -          | -          | Approved                          |
| 68     | LL/2008-09/071     | 110KV Karad (Ogalewadi)-Tembu            | -                           | 0.68       | -          | -          | -          | Approved                          |
| 69     | LL/2008-09/103     | 132KV Ln fr 132KVBhoom-220KV Paranda LL  | 0.05                        | -          | -          | -          | -          | Approved                          |
| 70     | LL/2008-09/040     | 132KV Daund-Yawat LL                     | 0.56                        | 0.14       | 2.03       | -          | -          | Approved                          |
| 71     | LL/2008-09/024     | 132Kv Wai - Lonand Line                  | 0.77                        | -          | -          | -          | -          | Approved                          |
| 72     | LL/2008-09/092     | 132KV Amgaon-Amgaon TSS LL               | 1.48                        | 0.13       | -          | -          | -          | Approved                          |
| 73     | LL/2008-09/095     | 132KV Kalmeshwar-Saoner LL               | 0.33                        | 0.05       | -          | -          | -          | Approved                          |
| 74     | LL/2008-09/020     | 132KV Nanded-Umri (Strg. only)           | 0.18                        | 0.11       | -          | -          | -          | Approved                          |
| 75     | LL/2008-09/022     | 132KV Washim-Mangrulpir LL               | 0.02                        | 0.07       | -          | -          | -          | Approved                          |
| 76     | LL/2008-09/010     | 132KV Deolai - 220KV Chitegaon Line      | 0.58                        | 0.01       | -          | -          | -          | Approved                          |
| 77     | LL/2008-09/028     | 132Kv Peth - Shirala SCDC Line           | 0.20                        | 0.04       | -          | -          | -          | Approved                          |
| 78     | LL/2008-09/025     | 132KV Umerkhed-Gunj LL                   | 0.01                        | 0.02       | -          | -          | -          | Approved                          |
| 79     | LL/2008-09/089     | 132KV Butibori-Khapri LL                 | 4.33                        | -          | -          | -          | -          | Approved                          |
| 80     | LL/2008-09/074     | 132KV Malegaon II(New-Malegaon I(old) LL | -                           | (0.02)     | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                            | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 81     | LL/2008-09/110     | 220KV C'pur MIDC-Gadchandur LL         | 0.72                        | -          | -          | -          | -          | Approved                          |
| 82     | LL/2008-09/105     | 220KV Wani-Warora LL                   | 0.53                        | -          | -          | -          | -          | Approved                          |
| 83     | LL/2008-09/049     | 220KV Vita-Pandharpur-Lamboti LL       | 0.29                        | -          | -          | -          | -          | Approved                          |
| 84     | SS/2008-09/050     | 132KV Alapalli SS                      | -                           | -          | -          | -          | -          | Approved                          |
| 85     | LL/2010-11/010     | 132KV Degaon-Mandrup Ln at Soregaon SS | 0.04                        | -          | -          | -          | -          | Approved                          |
| 86     | SS/2008-09/049     | 132KV Tumsar SS                        | -                           | -          | -          | -          | -          | Approved                          |
| 87     | LL/2008-09/109     | 220KV C'pur MIDC-C'pur-I LL            | -                           | -          | -          | -          | -          | Approved                          |
| 88     | SS/2009-10/003     | Estt. of 220KV Dapcheri S/S            | -                           | -          | -          | -          | -          | Approved                          |
| 89     | SS/2008-09/077     | 132 KV Nanduri                         | -                           | -          | -          | -          | -          | Approved                          |
| 90     | SS/2008-09/070     | 220 KV Pachod                          | -                           | -          | -          | -          | -          | Approved                          |
| 91     | SS/2008-09/026     | 220KV Sangli SS                        | -                           | -          | -          | -          | -          | Approved                          |
| 92     | LL/2008-09/107     | 220KV Amravati-Ambazari LL             | -                           | -          | -          | -          | -          | Approved                          |
| 93     | LL/2008-09/106     | 220KV Wardha-I-Yavatmal LL             | -                           | -          | -          | -          | -          | Approved                          |
| 94     | LL/2008-09/104     | 220KV Virur-Ashti LL                   | -                           | -          | -          | -          | -          | Approved                          |
| 95     | LL/2008-09/099     | 132KV Nagpur-II-Kanhan LL              | -                           | -          | -          | -          | -          | Approved                          |
| 96     | LL/2008-09/098     | 132KV Nagpur-I - Nagpur-II LL          | -                           | -          | -          | -          | -          | Approved                          |
| 97     | LL/2008-09/097     | 132KV Sakoli-Kaulewada LL              | -                           | -          | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                          | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--------------------------------------|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |                                      | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 98     | LL/2008-09/096     | 132KV Bhandara-Kardha LL             | -                           | -          | -          | -          | -          | Approved                          |
| 99     | LL/2008-09/079     | 132KV Sinner-Sangamner LL            | -                           | -          | -          | -          | -          | Approved                          |
| 100    | LL/2008-09/062     | 220KV Miraj-Ichalkaranji LL          | -                           | -          | -          | -          | -          | Approved                          |
| 101    | LL/2008-09/042     | 132KV Karangi-Akkalkot LL            | -                           | -          | -          | -          | -          | Approved                          |
| 102    | LL/2008-09/003     | 100KV Bapgaon-Bhiwandi Link Line     | -                           | -          | -          | -          | -          | Approved                          |
| 103    | LL/2009-10/001     | Strengthg of PS to Greater Mumbai    | 244.32                      | 107.39     | 26.98      | -          | -          | Approved                          |
| 104    | LL/2010-11/020     | UG Cable for various Zones           | 7.97                        | 22.12      | 1.54       | -          | -          | Approved                          |
| 105    | EV/2008-09/004     | 400KV Koradi-II SS                   | 280.07                      | 91.82      | 15.91      | -          | -          | Approved                          |
| 106    | SS/2011-12/006     | 765/400KV Aurangabad-III SS (Ektuni) | 166.21                      | 100.45     | 2.07       | -          | -          | Approved                          |
| 107    | LL/2012-13/001     | Mod-MBR in 62/18 & 74/19 A'bad lines | 2.64                        | 17.37      | 0.18       | -          | -          | Approved                          |
| 108    | SS/2009-10/012     | 400KV Nanded                         | 135.72                      | 79.56      | 7.37       | -          | -          | Approved                          |
| 109    | SS/2009-10/007     | 220KV Walchandnagar SS               | 43.75                       | 11.49      | 42.27      | -          | -          | Approved                          |
| 110    | SS/2009-10/002     | Estt. of 220KV Vile Bhagad S/S       | 5.13                        | 30.17      | 3.76       | -          | -          | Approved                          |
| 111    | SS/2011-12/018     | 220KV Kondhwa (GIS)                  | 24.77                       | 15.23      | 1.99       | -          | -          | Approved                          |
| 112    | SS/2009-10/008     | 220KV Kondhwa SS                     | -                           | -          | -          | -          | -          | Approved                          |
| 113    | LL/2014-15/002     | 400kV Quad DC Ln Koradi-II-III       | -                           | 124.21     | 16.25      | -          | -          | Approved                          |

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|--------|--------------------|---|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 114    | EV/2009-10/002     | 400KV Chandrapur-II SS  | 48.35                       | 45.72      | 51.94      | -          | -          | Approved                          |
| 115    | LL/2014-15/005     | Reori.of 132kV lines at 220kV Balapur SS  | -                           | 6.59       | 3.41       | 3.52       | -          | Approved                          |
| 116    | EV/2007-08/001     | 220KV Balapur SS  | 2.70                        | 0.55       | -          | -          | -          | Approved                          |
| 117    | SS/2010-11/011     | 400KV Alkud SS  | 0.05                        | 98.30      | 18.40      | -          | -          | Approved                          |
| 118    | AN/2012-13/019     | 125MVAR bus shunt reactor bay at Alkud  | -                           | -          | -          | -          | -          | Approved                          |
| 119    | SS/2010-11/015     | 400 KV Aurangabad- II (Tapti Tanda)   | 32.68                       | 39.36      | 46.06      | 7.92       | -          | Approved                          |
| 120    | LL/2014-15/006     | 220kV LILO on Waluj-Jalna at 400kV Thapt  | -                           | -          | 16.06      | -          | -          | Approved                          |
| 121    | SS/2011-12/008     | Estt. of 220 KV CHAKAN-II s/s   | 50.83                       | 7.65       | 7.05       | -          | -          | Approved                          |
| 122    | SS/2011-12/019     | 220KV Loni Deokar s/s   | -                           | 52.80      | 10.07      | 9.93       | -          | Approved                          |
| 123    | SS/2007-08/027     | 220KV Bhokardhan  | 38.66                       | 3.76       | 10.52      | -          | -          | Approved                          |
| 124    | SS/2008-09/008     | 220 KV Partur SS  | -                           | 38.80      | 46.77      | -          | -          | Approved                          |
| 125    | SS/2007-08/024     | 220KV Nagpur Ring Main SS   | 1.69                        | 24.52      | 1.27       | 22.00      | 20.00      | Approved                          |
| 126    | LL/2006-07/002     | LILO at Pardi and 2nd ckt stringing of Kanhan - Umred -50 KM alongwith 1X220KV bay each at 220KV Kanhan & Umred s/s | 3.11                        | 1.41       | -          | -          | -          | Approved                          |
| 127    | SS/2011-12/005     | 132KV Dharni SS   | -                           | 29.20      | 8.10       | -          | -          | Approved                          |
| 128    | SS/2011-12/002     | Estt. of 220 KV Bhalavani S/S   | 22.51                       | 5.72       | 0.23       | 10.00      | -          | Approved                          |



| Sr. No | Project Definition | Scheme Name                            | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 129    | SS/2011-12/021     | Estt. 132KV at Arni substation         | 21.18                       | 5.62       | -          | -          | -          | Approved                          |
| 130    | SS/2012-13/012     | 220/33kV Manjarsumba ss, Beed          | 17.75                       | 4.59       | 1.37       | -          | -          | Approved                          |
| 131    | SS/2014-15/001     | 220kV Shirsuphal, Baramati, Pune       | 16.80                       | 5.36       | 3.06       | -          | -          | Approved                          |
| 132    | SS/2008-09/038     | 220KV Kopergaon SS                     | 13.70                       | 4.60       | 0.25       | -          | -          | Approved                          |
| 133    | LL/2008-09/083     | 132KV Yeola-Kopergaon LL               | 0.08                        | 2.94       | 0.70       | -          | -          | Approved                          |
| 134    | SS/2010-11/003     | Estt. of 100KV Mumbra S/S              | 18.77                       | 2.48       | 1.16       | -          | -          | Approved                          |
| 135    | SS/2010-11/008     | 132KV Manegaon SS                      | 15.61                       | 0.62       | -          | -          | -          | Approved                          |
| 136    | SS/2014-15/008     | Estt 132/33kV Manegaon SS-Rev          | -                           | 2.16       | 0.69       | -          | -          | Approved                          |
| 137    | SS/2004-05/007     | R&M of EHV SS in Pune Urban Cr         | 0.03                        | -          | -          | -          | -          | Approved                          |
| 138    | EV/1993-94/001     | 400KV Dhabhol Evacuation PH-I&II       | 3.42                        | 0.91       | -          | -          | -          | Approved                          |
| 139    | SS/1998-99/007     | 400KV Akola SS                         | 4.04                        | -          | 0.85       | -          | -          | Approved                          |
| 140    | SS/1998-99/008     | Estt. of 220KV & 132KV Ring Main A'bad | 2.08                        | -          | -          | -          | -          | Approved                          |
| 141    | SS/1998-99/005     | 220 KV Sawangi SS                      | 0.48                        | -          | -          | -          | -          | Approved                          |
| 142    | TA/2006-07/079     | 132KV Mangrulpir                       | 0.03                        | -          | -          | -          | -          | Approved                          |
| 143    | TA/2006-07/080     | 132 KV Lalkhedi                        | -                           | 0.02       | -          | -          | -          | Approved                          |
| 144    | TA/2006-07/103     | 132 KV AUSA                            | 0.06                        | 0.05       | -          | -          | -          | Approved                          |
| 145    | TR/2006-07/021     | 132KV Nilanga                          | 0.09                        | -          | -          | -          | -          | Approved                          |
| 146    | TA/2006-07/067     | 132KV Majalgaon                        | 0.01                        | 0.06       | -          | -          | -          | Approved                          |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 147    | TA/2006-07/066     | 132KV Umri                               | -                           | 0.03       | -          | -          | -          | Approved                          |
| 148    | TA/2006-07/027     | 220KV Bhigwan SS                         | 0.00                        | -          | -          | -          | -          | Approved                          |
| 149    | TR/2006-07/004     | Aug 132 KV at 220 KV S'pur 2 & Malinagar | 0.20                        | 0.53       | -          | -          | -          | Approved                          |
| 150    | TR/2006-07/013     | 132 KV Kalamb                            | 0.08                        | -          | -          | -          | -          | Approved                          |
| 151    | TR/2006-07/002     | Aug at 132 KV Degaon & S'pur MIDC        | 0.00                        | -          | -          | -          | -          | Approved                          |
| 152    | TR/2006-07/001     | Aug Schemes under Pune Cr.               | 0.41                        | 0.01       | -          | -          | -          | Approved                          |
| 153    | SS/1998-99/003     | 220KV Phursungi SS                       | -                           | -          | -          | -          | -          | Approved                          |
| 154    | TA/2006-07/006     | Aug of 220KV Nerul                       | 0.06                        | -          | -          | -          | -          | Approved                          |
| 155    | TA/2005-06/001     | 220KV Kolshet                            | 0.06                        | -          | -          | -          | -          | Approved                          |
| 156    | TA/2006-07/014     | 220KV Mumewadi                           | 0.08                        | 0.05       | -          | -          | -          | Approved                          |
| 157    | TA/2006-07/015     | 220Kv Halkarni                           | -                           | 0.11       | -          | -          | -          | Approved                          |
| 158    | TR/2006-07/032     | 132KV Uppalwadi                          | 1.04                        | 0.01       | -          | -          | -          | Approved                          |
| 159    | TA/2004-05/004     | Augmentation Schemes under Nagpur Zone   | -                           | -          | -          | -          | -          | Approved                          |
| 160    | TA/2004-05/001     | 132KV NCL SS                             | 0.03                        | 0.04       | -          | -          | -          | Approved                          |
| 161    | TA/2004-05/005     | 220KV Nalasopara                         | 0.01                        | -          | -          | -          | -          | Approved                          |
| 162    | SS/2004-05/002     | Estt. of 220KV A'Nath-II(Jhambul) S/S    | 1.91                        | -          | -          | -          | -          | Approved                          |
| 163    | TA/2000-01/001     | 220KV Dondaicha SS                       | 0.32                        | -          | -          | -          | -          | Approved                          |
| 164    | SS/1997-98/001     | 220KV Beed SS                            | -                           | -          | 2.96       | -          | -          | Approved                          |
| 165    | EV/2007-08/002     | 400KV Bhusawal-II SS                     | 6.06                        | 9.13       | 0.73       | -          | -          | Approved                          |
| 166    | EV/2007-08/003     | 400KV Khaperkheda SS                     | 1.02                        | -          | 0.98       | -          | -          | Approved                          |
| 167    | LL/2009-10/007     | 220KV Nagothane                          | 8.82                        | 6.74       | -          | -          | -          | Approved                          |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | Wadkhal line                             |                             |            |            |            |            |                                   |
| 168    | SS/2013-14/013     | 220kV M/s Viraj Profile,Boisar,Thane     | 1.62                        | 13.83      | 3.62       | -          | -          | Approved                          |
| 169    | SS/2013-14/016     | 132kV Samsherpur, Nandurbar              | 9.89                        | 5.50       | 1.39       | -          | -          | Approved                          |
| 170    | SS/2011-12/025     | Esta of 220/33kV SS Nerle of Panama Wind | 14.54                       | -          | -          | -          | -          | Approved                          |
| 171    | AN/2011-12/008     | Wind Energy Project 132/33kV Khaprle     | -                           | -          | -          | -          | -          | Approved                          |
| 172    | SS/2013-14/011     | 132kV Gosikhurd,Bhandara-Modification    | 10.21                       | 4.22       | 0.01       | -          | -          | Approved                          |
| 173    | TA/2007-08/002     | Aug of 400KV Schemes                     | 0.00                        | -          | -          | -          | -          | Approved                          |
| 174    | TA/2007-08/005     | 400KV Jejuri SS                          | 0.61                        | -          | -          | -          | -          | Approved                          |
| 175    | SS/2010-11/019     | Estt. 132KV Pimpalgaon(Khadki) SS        | 0.25                        | 12.44      | 11.26      | 8.05       | -          | Approved                          |
| 176    | LL/2008-09/008     | EHV Link LInes in Aurangabad Zn          | 6.92                        | 4.98       | 1.70       | -          | -          | Approved                          |
| 177    | LL/2007-08/007     | 132KV Padegaon-Pishore Line              | 0.73                        | -          | -          | -          | -          | Approved                          |
| 178    | LL/2007-08/006     | 220KV Parli-Nanded Line                  | -                           | -          | -          | -          | -          | Approved                          |
| 179    | SS/2012-13/005     | 132 KV Rajur SS - Nasik                  | -                           | 10.24      | 5.62       | 1.68       | -          | Approved                          |
| 180    | LL/2009-10/005     | 220KV Osmanabad-Barshi Line              | 1.21                        | 1.15       | -          | -          | -          | Approved                          |
| 181    | SS/2009-10/013     | 220KV Paranda                            | 1.84                        | 0.01       | -          | -          | -          | Approved                          |
| 182    | SS/2007-08/031     | 220 KV Paranda SS                        | 1.08                        | 0.76       | -          | -          | -          | Approved                          |
| 183    | SS/2007-08/026     | 220KV Patoda                             | 1.92                        | 0.01       | -          | -          | -          | Approved                          |

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|--------|--------------------|------------------------------------|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |                                    | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 184    | EV/2008-09/002     | 220KV Ghatodi SS                   | 2.90                        | 4.79       | 3.33       | -          | -          | Approved                          |
| 185    | TA/2006-07/008     | Addnl T/F O&M Cr Pune (77/18.1.07) | 1.03                        | 0.82       | 0.32       | -          | -          | Approved                          |
| 186    | TA/2006-07/001     | Instt. of addnl T/F at O&M Panvel  | 3.09                        | 0.34       | -          | -          | -          | Approved                          |
| 187    | TA/2006-07/002     | Instt. of addnl T/F at O&M Kalwa   | 1.12                        | -          | -          | -          | -          | Approved                          |
| 188    | TA/2006-07/063     | 220 KV Jalna                       | (0.01)                      | 0.10       | -          | -          | -          | Approved                          |
| 189    | TA/2006-07/029     | 220KV Sawantwadi S/S               | 0.26                        | 0.09       | -          | -          | -          | Approved                          |
| 190    | TA/2006-07/028     | 220KV Niwaliphata SS               | 0.14                        | 0.01       | -          | -          | -          | Approved                          |
| 191    | TA/2006-07/026     | 220KV Kharepatan S/S               | -                           | 0.13       | 0.25       | 5.22       | -          | Approved                          |
| 192    | TA/2006-07/031     | 132KV Kankavali SS                 | 0.13                        | -          | -          | -          | -          | Approved                          |
| 193    | TA/2006-07/032     | 110KV Talebazar SS                 | 0.03                        | -          | -          | -          | -          | Approved                          |
| 194    | TA/2006-07/055     | 132KV Degloor                      | 0.09                        | -          | -          | -          | -          | Approved                          |
| 195    | TR/2006-07/017     | 132KV Mantha                       | 0.04                        | 0.05       | -          | -          | -          | Approved                          |
| 196    | TR/2006-07/015     | 132KV Basmat                       | 0.07                        | -          | -          | -          | -          | Approved                          |
| 197    | TA/2006-07/060     | 132 KV Akhada Balapur              | 0.03                        | 0.01       | -          | -          | -          | Approved                          |
| 198    | TA/2006-07/054     | 132KV Himayatnagar                 | 0.03                        | -          | -          | -          | -          | Approved                          |
| 199    | TA/2006-07/062     | 132KV Khultabad                    | 0.00                        | 0.01       | -          | -          | -          | Approved                          |
| 200    | TA/2006-07/100     | 132KV Purna                        | 0.01                        | -          | -          | -          | -          | Approved                          |
| 201    | TA/2006-07/053     | 132 Kv Mukhed                      | 0.01                        | -          | -          | -          | -          | Approved                          |
| 202    | LL/2010-11/004     | 220KV Lns for 400KV PGCIL SS       | -                           | 7.14       | -          | -          | -          | Approved                          |
| 203    | SS/2009-10/010     | 132KV Taharabad SS                 | 3.10                        | 2.19       | 0.01       | -          | -          | Approved                          |
| 204    | SS/2008-09/012     | 132KV Someshwarnagar SS            | 0.07                        | 0.01       | -          | -          | -          | Approved                          |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 205    | SS/2004-05/003     | Strengthening of EHV Ntwk                | 5.40                        | 0.68       | 0.10       | -          | -          | Approved                          |
| 206    | TR/2008-09/060     | 132 KV Ujani                             | 3.15                        | -          | -          | -          | -          | Approved                          |
| 207    | TA/2008-09/056     | 132 KV Parbhani                          | 0.01                        | -          | -          | -          | -          | Approved                          |
| 208    | TA/2008-09/051     | 220KV Osmanabad                          | 0.19                        | -          | -          | -          | -          | Approved                          |
| 209    | TA/2008-09/060     | 132KV Kundalwadi                         | 0.57                        | -          | -          | -          | -          | Approved                          |
| 210    | TR/2008-09/064     | 132 KV Killari                           | 0.03                        | -          | -          | -          | -          | Approved                          |
| 211    | TA/2008-09/059     | 132KV Kinwat                             | 0.51                        | -          | -          | -          | -          | Approved                          |
| 212    | TR/2008-09/067     | 132 KV Naldurg                           | 0.11                        | -          | -          | -          | -          | Approved                          |
| 213    | TA/2008-09/062     | 132KV Udgir                              | 0.03                        | -          | -          | -          | -          | Approved                          |
| 214    | TR/2008-09/066     | 132 KV Bhoom                             | 0.04                        | -          | -          | -          | -          | Approved                          |
| 215    | TR/2008-09/068     | 132 KV Kaij                              | 0.17                        | -          | -          | -          | -          | Approved                          |
| 216    | TR/2008-09/063     | 132 KV AUSA                              | 0.17                        | -          | -          | -          | -          | Approved                          |
| 217    | TR/2008-09/051     | 132 KV Narsi                             | 0.04                        | -          | -          | -          | -          | Approved                          |
| 218    | TR/2008-09/087     | 132kV Telgaon s/s                        | 0.08                        | -          | -          | -          | -          | Approved                          |
| 219    | SS/2006-07/003     | Estt. of 220KV Magarpatta                | 2.38                        | 0.78       | -          | -          | -          | Approved                          |
| 220    | SS/2007-08/014     | 220KV Magarpatta SS                      | 12.71                       | -          | -          | -          | -          | Approved                          |
| 221    | SS/2006-07/002     | Estt. of 220KV Talegaon                  | 0.82                        | 1.38       | 0.06       | -          | -          | Approved                          |
| 222    | SS/2006-07/004     | Estt. of 220KV Khadakwasla (Nanded city) | 0.27                        | 1.90       | 2.49       | -          | -          | Approved                          |
| 223    | TA/2006-07/020     | Add. Trf. In Tr.O& M Karad Zone          | 0.98                        | 0.24       | -          | -          | -          | Approved                          |
| 224    | TA/2006-07/007     | Addnl T/F O&M Cr Karad (Pune)            | 0.50                        | 0.09       | -          | -          | -          | Approved                          |
| 225    | TA/2006-07/084     | 220KV Yavatmal                           | -                           | 0.18       | -          | -          | -          | Approved                          |
| 226    | TA/2006-07/033     | 220KV Butibori SS                        | -                           | 0.22       | -          | -          | -          | Approved                          |
| 227    | TA/2006-07/082     | 220KV Dhamangaon                         | -                           | 0.03       | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                      | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|----------------------------------|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |                                  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 228    | TR/2006-07/008     | 220KV Amravati SS                | -                           | -          | -          | -          | -          | Approved                          |
| 229    | TA/2006-07/092     | 220KV Dhule                      | -                           | 0.35       | -          | -          | -          | Approved                          |
| 230    | TA/2006-07/104     | 132 KV Jalgaon MIDC SS           | 0.13                        | 0.05       | -          | -          | -          | Approved                          |
| 231    | TA/2006-07/058     | 132Kv Latur Mide                 | 0.07                        | 0.31       | -          | -          | -          | Approved                          |
| 232    | TA/2006-07/057     | 132Kv Chakur                     | 0.11                        | 0.10       | -          | -          | -          | Approved                          |
| 233    | TA/2006-07/037     | 132KV Sakoli SS                  | 0.10                        | 0.05       | -          | -          | -          | Approved                          |
| 234    | TA/2006-07/059     | 132Kv Raimoha                    | 0.03                        | 0.12       | -          | -          | -          | Approved                          |
| 235    | TA/2006-07/095     | 132 KV Nardane                   | 0.14                        | -          | -          | -          | -          | Approved                          |
| 236    | TA/2006-07/041     | 132KV Mul SS                     | 0.04                        | -          | -          | -          | -          | Approved                          |
| 237    | TA/2006-07/093     | 132 KV Parola                    | (0.06)                      | -          | -          | -          | -          | Approved                          |
| 238    | TA/2006-07/081     | 220KV Akola-II                   | -                           | 0.01       | -          | -          | -          | Approved                          |
| 239    | TA/2006-07/073     | 132KV Jambazar Washim            | 0.29                        | 0.18       | -          | -          | -          | Approved                          |
| 240    | TA/2006-07/070     | 132KV Daryapur                   | 0.26                        | 0.21       | -          | -          | -          | Approved                          |
| 241    | TA/2006-07/074     | 132KV Motala                     | 0.16                        | 0.11       | -          | -          | -          | Approved                          |
| 242    | TA/2006-07/075     | 132KV Risod                      | 0.04                        | -          | -          | -          | -          | Approved                          |
| 243    | TA/2006-07/071     | 132KV Digras                     | 0.02                        | -          | -          | -          | -          | Approved                          |
| 244    | TA/2006-07/076     | 132KV Umarkhed                   | 0.00                        | -          | -          | -          | -          | Approved                          |
| 245    | SS/2007-08/016     | 220KV Jath SS                    | 3.56                        | 1.26       | 1.60       | -          | -          | Approved                          |
| 246    | LL/2010-11/006     | 132KV Jalgaon-Dharangaon Line    | 0.01                        | -          | -          | -          | -          | Approved                          |
| 247    | SS/2013-14/014     | 132kV Chimangaon,Koregaon,Satara | 0.02                        | 4.71       | 11.35      | 3.89       | -          | Approved                          |
| 248    | EV/2005-06/001     | Evctn of Tarapur Extn            | 2.70                        | -          | -          | -          | -          | Approved                          |
| 249    | SS/2007-08/025     | 220KV Shendra                    | 1.96                        | 0.36       | -          | -          | -          | Approved                          |
| 250    | SS/2007-08/019     | 132KV Ghatanji SS                | 0.39                        | 1.41       | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                              | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 251    | SS/2007-08/020     | 132KV Patur SS                           | 0.12                        | -          | -          | -          | -          | Approved                          |
| 252    | SS/2010-11/012     | 132KV Ghodegaon SS                       | 0.14                        | 3.90       | 0.69       | -          | -          | Approved                          |
| 253    | SS/1996-97/001     | Estt. of 220KV Dombivali-II(PAL) S/S     | -                           | -          | -          | -          | -          | Approved                          |
| 254    | TR/2008-09/020     | 220KV Akola-II(Apattapa) SS              | 0.20                        | -          | -          | -          | -          | Approved                          |
| 255    | SS/2003-04/002     | 132KV Ganeshkhind SS                     | 0.17                        | 0.08       | -          | -          | -          | Approved                          |
| 256    | TR/2008-09/059     | 132 KV Georai                            | 0.19                        | -          | -          | -          | -          | Approved                          |
| 257    | TR/2008-09/053     | 132 KV Tamsa                             | 0.62                        | -          | -          | -          | -          | Approved                          |
| 258    | TR/2008-09/083     | 100KV Mhasala                            | -                           | -          | -          | -          | -          | Approved                          |
| 259    | TR/2008-09/057     | 132 KV Kandhar                           | 0.84                        | -          | -          | -          | -          | Approved                          |
| 260    | TR/2008-09/028     | 132KV Malegaon SS                        | 0.78                        | 0.01       | -          | -          | -          | Approved                          |
| 261    | TR/2008-09/026     | 132KV Malkapur SS                        | 0.06                        | 0.08       | -          | -          | -          | Approved                          |
| 262    | TR/2008-09/069     | 132 KV Majalgaon                         | 0.05                        | -          | -          | -          | -          | Approved                          |
| 263    | TR/2008-09/061     | 132 KV Raimoha                           | 0.09                        | -          | -          | -          | -          | Approved                          |
| 264    | TA/2008-09/011     | 220KV Baramati MIDC SS                   | 0.05                        | 0.06       | -          | -          | -          | Approved                          |
| 265    | TR/2008-09/076     | 220KV Pirangut SS                        | 0.02                        | -          | -          | -          | -          | Approved                          |
| 266    | LL/2010-11/012     | 220Kv LILO Mahad-Nagothne for Kandalgaon | 2.14                        | 0.66       | 0.57       | -          | -          | Approved                          |
| 267    | SS/2009-10/015     | 132KV Nivali                             | 2.33                        | 0.47       | -          | -          | -          | Approved                          |
| 268    | SS/2006-07/010     | 220KV Hingoli                            | 0.12                        | 0.60       | 1.24       | -          | -          | Approved                          |
| 269    | SS/2006-07/008     | 220KV Wani SS                            | 0.11                        | -          | -          | -          | -          | Approved                          |
| 270    | SS/2007-08/022     | 132KV Lakhandur SS                       | 0.59                        | 0.12       | -          | -          | -          | Approved                          |
| 271    | SS/2006-07/011     | 132KV Badnapur                           | 0.52                        | 0.61       | -          | -          | -          | Approved                          |
| 272    | SS/2010-11/007     | 132KV Karmala SS                         | 1.69                        | 0.91       | -          | -          | -          | Approved                          |
| 273    | TA/2006-07/056     | 220KV Parvati SS                         | -                           | 0.03       | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                            | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 274    | SS/2006-07/017     | 220KV Alephata                         | -                           | -          | -          | -          | -          | Approved                          |
| 275    | TA/2006-07/045     | 220KV Wardha-II (Bhugaon) SS           | 0.16                        | -          | -          | -          | -          | Approved                          |
| 276    | SS/2007-08/004     | Estt. of 220KV Knowledge Park (Airoli) | 0.78                        | 0.07       | -          | -          | -          | Approved                          |
| 277    | SS/2007-08/001     | Estt. of 220KV Sonkhar S/S             | 0.57                        | 0.76       | -          | -          | -          | Approved                          |
| 278    | TA/2008-09/026     | 220KV Wardha-II SS                     | 0.20                        | 0.11       | 1.97       | 5.32       | -          | Approved                          |
| 279    | TR/2008-09/015     | 110KV Kavthemahankal SS                | 0.32                        | -          | -          | -          | -          | Approved                          |
| 280    | TA/2008-09/024     | 220KV Gadchandur SS                    | 0.12                        | -          | -          | -          | -          | Approved                          |
| 281    | TA/2008-09/028     | 132KV Sindewahi SS                     | -                           | 1.39       | 0.06       | 3.15       | -          | Approved                          |
| 282    | TR/2008-09/035     | 132KV Bramhapuri SS                    | 0.01                        | -          | -          | -          | -          | Approved                          |
| 283    | TA/2006-07/003     | 220KV Nerul                            | 1.91                        | -          | -          | -          | -          | Approved                          |
| 284    | LL/2012-13/002     | Repl.of cond.with ACCC for Mumbai      | -                           | 1.80       | 0.76       | -          | -          | Approved                          |
| 285    | TR/2008-09/021     | 220KV Chikhali SS                      | 1.26                        | -          | -          | -          | -          | Approved                          |
| 286    | TR/2008-09/032     | 132KV Mehekar SS                       | -                           | -          | -          | -          | -          | Approved                          |
| 287    | TA/2008-09/023     | 132KV Gunj SS                          | 0.20                        | -          | -          | -          | -          | Approved                          |
| 288    | TA/2008-09/035     | 132KV Manmad SS                        | 0.08                        | -          | -          | -          | -          | Approved                          |
| 289    | TR/2008-09/084     | 132KV Morshi SS                        | 0.05                        | -          | -          | -          | -          | Approved                          |
| 290    | TR/2008-09/030     | 132KV Anjangaon SS                     | 0.04                        | -          | -          | -          | -          | Approved                          |
| 291    | SS/1988-89/001     | Estt of SS under Nagpur Zone           | 0.76                        | -          | -          | -          | -          | Approved                          |
| 292    | SS/1995-96/001     | 220KV Chikhali SS                      | 0.15                        | -          | -          | -          | -          | Approved                          |
| 293    | TA/2006-07/077     | 132KV Washim                           | 0.01                        | -          | -          | -          | -          | Approved                          |



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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 294    | SS/1998-99/004     | 400KV Jejuri                             | 0.26                        | -          | -          | -          | -          | Approved                          |
| 295    | SS/2000-01/002     | Upgrdn of G'Khind-Lonavala Ln to 132KV   | 0.01                        | 0.24       | (0.05)     | -          | -          | Approved                          |
| 296    | SS/2004-05/001     | Upgradation of Khopoli-Taloja-Kalwa line | 0.21                        | -          | -          | -          | -          | Approved                          |
| 297    | TA/2008-09/002     | Aug. of 400KV Nagothane S/S              | 1.60                        | -          | -          | -          | -          | Approved                          |
| 298    | TR/2008-09/004     | 220KV Chinchwad SS                       | 0.16                        | -          | -          | -          | -          | Approved                          |
| 299    | TA/2008-09/016     | 220KV Malinagar SS                       | 0.14                        | 0.01       | 0.00       | -          | -          | Approved                          |
| 300    | TA/2008-09/015     | 220KV Hinjewadi SS                       | 0.01                        | 0.04       | -          | -          | -          | Approved                          |
| 301    | TR/2008-09/003     | 220KV Hinjewadi SS                       | -                           | -          | -          | -          | -          | Approved                          |
| 302    | TA/2008-09/013     | 220KV TELCO SS                           | 0.01                        | 0.03       | -          | -          | -          | Approved                          |
| 303    | TA/2008-09/012     | 220KV Alephata SS                        | 0.46                        | 0.02       | -          | -          | -          | Approved                          |
| 304    | TR/2008-09/071     | 132KV Mundwa SS                          | 0.00                        | -          | -          | -          | -          | Approved                          |
| 305    | TA/2008-09/006     | 132KV Kamthadi (Nigade) SS               | 0.00                        | -          | -          | 7.62       | -          | Approved                          |
| 306    | TA/2008-09/008     | 132KV Shirur SS                          | 0.14                        | 0.13       | -          | -          | -          | Approved                          |
| 307    | TR/2008-09/074     | 132KV Kuradwadi SS                       | 0.00                        | -          | -          | -          | -          | Approved                          |
| 308    | TR/2008-09/072     | 132KV Walchandnagar SS                   | 0.02                        | -          | -          | -          | -          | Approved                          |
| 309    | TR/2008-09/009     | 132KV Indapur SS                         | 0.11                        | -          | -          | -          | -          | Approved                          |
| 310    | SS/2008-09/015     | 400KV Lonikand-II SS                     | 0.93                        | 0.55       | 2.74       | -          | -          | Approved                          |
| 311    | EV/2010-11/004     | Evac. of power from Parli TPS (Extn)     | 1.17                        | 0.13       | -          | -          | -          | Approved                          |
| 312    | TA/2007-08/003     | 400 Kv Talandge (Kop Lll )               | 1.16                        | 0.04       | -          | -          | -          | Approved                          |
| 313    | SS/2007-08/012     | 132KV Karanja SS                         | 0.00                        | -          | -          | -          | -          | Approved                          |
| 314    | SS/2007-08/006     | Estt. of 100KV                           | 0.67                        | 0.03       | -          | -          | -          | Approved                          |

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|--------|--------------------|---|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | Kolhare(Neral) S/S                      |                             |            |            |            |            |                                   |
| 315    | SS/2007-08/009     | 132KV Bambawade SS                      | 0.13                        | 0.11       | -          | -          | -          | Approved                          |
| 316    | SS/2007-08/032     | 132KV Chandwad SS                       | 0.23                        | -          | -          | -          | -          | Approved                          |
| 317    | SS/2007-08/023     | 132KV Lendra GIS SS                     | -                           | -          | -          | -          | -          | Approved                          |
| 318    | SS/2008-09/036     | 132KV Pandharkawada-II SS               | 0.22                        | 0.04       | 0.36       | -          | -          | Approved                          |
| 319    | SS/2006-07/009     | 132KV Jam SS                            | 0.57                        | 0.42       | -          | -          | -          | Approved                          |
| 320    | LL/2010-11/005     | 132KV Amalner-Nardane Line              | 0.17                        | 0.81       | -          | -          | -          | Approved                          |
| 321    | SS/2008-09/033     | 132KV Murtizapur SS                     | 0.62                        | 0.36       | 0.15       | -          | -          | Approved                          |
| 322    | EV/2008-09/003     | EVACUATION OF POWER GENERATED BY JSW    | -                           | -          | -          | -          | -          | Approved                          |
| 323    | SS/2001-02/001     | 220KV Amalner SS                        | 0.05                        | -          | -          | -          | -          | Approved                          |
| 324    | SS/2004-05/013     | 132 kV Kharda SS ( Final bill)          | 0.05                        | -          | -          | -          | -          | Approved                          |
| 325    | SS/2004-05/006     | 132 KV Kundalwadi SS                    | 0.65                        | 0.04       | -          | -          | -          | Approved                          |
| 326    | TA/2009-10/016     | 400KV Aurangabad (Waluj)                | (0.12)                      | 0.44       | 0.05       | 0.00       | -          | Approved                          |
| 327    | TA/2009-10/015     | 400KV Bhusawal SS                       | 0.26                        | -          | -          | -          | -          | Approved                          |
| 328    | TA/2009-10/009     | 400KV Parli SS                          | 0.08                        | -          | -          | -          | -          | Approved                          |
| 329    | TA/2009-10/002     | Aug. of conso scheme-Kharghar           | 0.01                        | 0.06       | -          | -          | -          | Approved                          |
| 330    | SS/2006-07/001     | Comprehensive scheme in Bhiwandi Circle | 0.12                        | 0.49       | -          | -          | -          | Approved                          |
| 331    | TA/2008-09/003     | 220KV Apta                              | 0.01                        | -          | -          | -          | -          | Approved                          |

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|--------|--------------------|---|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 332    | TA/2008-09/067     | 220 KV Mahad                            | 0.00                        | -          | -          | -          | -          | Approved                          |
| 333    | TR/2008-09/079     | 220KV Kandalgaon                        | -                           | -          | -          | -          | -          | Approved                          |
| 334    | TA/2008-09/069     | 100 KV Patalganga                       | 0.35                        | -          | -          | -          | -          | Approved                          |
| 335    | TA/2008-09/068     | 220 KV Ambernath-III                    | 0.07                        | -          | -          | -          | -          | Approved                          |
| 336    | LL/2007-08/003     | EHV Link Lines at Karad Zone            | 0.30                        | 0.09       | -          | -          | -          | Approved                          |
| 337    | SS/2007-08/008     | Estt. of 400KV Chakan                   | -                           | 0.37       | (2.22)     | -          | -          | Approved                          |
| 338    | SS/2010-11/024     | Estt of 400KV Aurangabad-II SS (no use) | -                           | 0.25       | -          | -          | -          | Approved                          |
| 339    | TA/2008-09/017     | 132KV Akola-I(Gorakshan Rd) SS          | 0.24                        | -          | 2.04       | 7.62       | -          | Approved                          |
| 340    | SS/2007-08/003     | Estt. of 220KV Bhandup GIS S/S          | 0.14                        | 0.05       | -          | -          | -          | Approved                          |
| 341    | SS/2007-08/007     | Estt. of 132KV Navivess                 | 0.24                        | 0.19       | -          | -          | -          | Approved                          |
| 342    | LL/2005-06/001     | Estt. of 132kv level at 220kv Tilwani   | -                           | -          | -          | -          | -          | Approved                          |
| 343    | TA/2005-06/004     | 220 kV Ichalkaranji S/S                 | -                           | -          | -          | -          | -          | Approved                          |
| 344    | TR/2005-06/001     | 110KV Ichalkaranji SS                   | -                           | -          | -          | -          | -          | Approved                          |
| 345    | TA/2005-06/006     | 220KV Butibori SS                       | -                           | 0.02       | -          | -          | -          | Approved                          |
| 346    | TA/2007-08/001     | GIS bays at 100KV Bhiwandi-I            | 0.10                        | -          | -          | -          | -          | Approved                          |
| 347    | TA/2008-09/010     | 132KV Indapur SS                        | 0.00                        | 0.08       | -          | -          | -          | Approved                          |
| 348    | TA/2009-10/001     | Aug. of 400KV Kalwa S/S                 | 0.08                        | -          | -          | -          | -          | Approved                          |
| 349    | SS/2006-07/012     | 132 KV Elichpur                         | -                           | 0.05       | -          | -          | -          | Approved                          |
| 350    | SS/2016-17/001     | 400kV Nashik Eklahare GIS S/Stn. - Mod  | -                           | -          | -          | -          | 150.00     | Approved                          |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 351    | SS/2015-16/003     | EST OF 220/132 KV MALKAPUR SS BULDHANA   | -                           | -          | -          | 84.00      | 10.88      | Approved                          |
| 352    | SS/2015-16/002     | 220/132 kV Jalkot,Latur                  | -                           | -          | -          | 84.00      | 10.19      | Approved                          |
| 353    | SS/2016-17/010     | Estt of 220/132/33kV Narangwadi s/s      | -                           | -          | -          | -          | 92.23      | Approved                          |
| 354    | SS/2016-17/003     | Estt of 220/132/33 kV Jalna Nagewadi s/s | -                           | -          | 70.77      | -          | -          | Approved                          |
| 355    | SS/2017-18/004     | Estt of 220/132/33kV Nagbhid s/s         | -                           | -          | -          | -          | 60.00      | Approved                          |
| 356    | SS/2016-17/008     | 220/132/33kV Kekatnimbhora ss            | -                           | -          | -          | -          | 54.57      | Approved                          |
| 357    | SS/2016-17/002     | Estt 220/132kV Viroda SS new             | -                           | -          | -          | 41.00      | 5.12       | Approved                          |
| 358    | SS/2011-12/011     | Estt. of 220 KV Viroda s/s               | -                           | -          | -          | -          | -          | Approved                          |
| 359    | SS/2017-18/005     | Estt. of 132/22kV EON Kharadi, Pune      | -                           | -          | -          | -          | 44.82      | Approved                          |
| 360    | SS/132CHAMORSH I   | 132 kV Chamorshi S/S                     | -                           | -          | -          | -          | 40.49      | Approved                          |
| 361    | SS/2016-17/004     | Establishemnt of 220kV GIS Shendra       | -                           | -          | -          | -          | 37.22      | Approved                          |
| 362    | SS/2016-17/007     | Estt.132kV Dhadgaon ss,Nandurbar         | -                           | -          | -          | 24.00      | 3.60       | Approved                          |
| 363    | SS/2010-11/023     | 132 kV Kothali S/S                       | -                           | -          | -          | -          | 34.55      | Approved                          |
| 364    | SS/2011-12/023     | LL-220kV Magarpatta S/S-132kV Rastapeth  | -                           | -          | 0.08       | 24.00      | -          | Approved                          |
| 365    | SS/2012-13/003     | Estt. 132KV at Erandol s/s               | -                           | -          | 24.13      | 6.08       | -          | Approved                          |

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|--------|--------------------|---|-----------------------------|------------|------------|------------|------------|--------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                |
| 366    | SS/2016-17/005     | Estt of 132kV Allapalli & Etapalli-Rev                            | -                           | -          | -          | -          | 29.22      | Approved                       |
| 367    | SS/2013-14/009     | 132kV Kavathe-Yamai   | -                           | 0.00       | 21.97      | 3.26       | -          | Approved                       |
| 368    | LL/2016-17/003     | 220 kV link lines for 400 kV Kudus SS                             | -                           | -          | -          | 25.00      | 2.48       | Approved                       |
| 369    | SS/2010-11/006     | 132KV Nimboni SS  | -                           | -          | 5.42       | 15.00      | -          | Approved                       |
| 370    | SS/2015-16/004     | Est.132kV Ralegaon ss, Yavatmal                                   | -                           | -          | -          | 15.00      | 2.19       | Approved                       |
| 371    | LL/2011-12/016     | 220kV In frm 400kV Solapur PGCIL (Kum'ri)ss-Bale                  | -                           | -          | 0.05       | 10.00      | -          | Approved                       |
| 372    | AN/2013-14/022     | 125MVAR bus shunt reactor Karad                                   | -                           | -          | 10.30      | 2.40       | -          | Approved                       |
| 373    | LL/2017-18/007     | CONST OF 220KV BHOKARDHAN-132KV DHAD S/S                          | -                           | -          | -          | -          | 11.03      | Approved                       |
| 374    | LL/2017-18/004     | 110KV SC LL PETH-BORGAON+ICT AT PETH                              | -                           | -          | -          | 9.45       | 1.05       | Approved                       |
| 375    | LL/2016-17/004     | LILO 220KVDeoli-Ghatodi at 220KVYavatmal                          | -                           | -          | -          | 8.40       | -          | Approved                       |
| 376    | Myt2017/LL22       | LILO on 220 kV Parli-Osmanabad S/C line at Parli (PG)             | -                           | -          | -          | 3.02       | 0.34       | Approved                       |
| 377    | Myt2017/LL21       | LILO on both circuits of 220 kV Parli-Harangul line at Parli (PG) | -                           | -          | -          | 3.02       | 0.34       | Approved                       |

| Sr. No | Project Definition | Scheme Name  | Capitalisation (Rs. Crores) |            |            |            |            | Status (Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|--------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                |
| 378    | LL/2017-18/006     | 132 KV LILO ON KANNAD-KAGZIPURA LINE   | -                           | -          | -          | -          | 5.94       | Approved                       |
| 379    | LL/2017-18/001     | 220kV DC line frm 400kV Jejuri to Lonand   | -                           | -          | -          | 4.59       | 0.51       | Approved                       |
| 380    | LL/2014-15/003     | Diversion of 220kV M/C line for Baramati Medical college and hospital through underground cable(Civil+Elect) | -                           | -          | -          | 4.50       | -          | Approved                       |
| 381    | AN/2012-13/017     | Shunt Reactor 400kV Kolhapur(Talandge)   | -                           | -          | 11.05      | -          | -          | Approved                       |
| 382    | SS/2016-17/009     | Est 132kV level at 220kV Nandgaonpeth ss   | -                           | -          | 4.55       | -          | -          | Approved                       |
| 383    | LL/2008-09/091     | 132KV Saoner-Katol LL  | -                           | -          | -          | -          | -          | Approved                       |
| 384    | AN/2014-15/029     | Administrative building Nagpur   | -                           | -          | -          | -          | -          | Approved                       |
| 385    | SS/2014-15/007     | Esta of 132 /33 kV Mendhwan Sangamner  | -                           | -          | -          | -          | -          | Approved                       |
| 386    | SS/2010-11/025     | Estt. 132KV Bhuyar SS  | -                           | -          | -          | -          | -          | Approved                       |
| 387    | TA/2008-09/001     | Aug. 220KV Bhiwandi-II GIS S/S   | -                           | -          | -          | -          | -          | Approved                       |
| 388    | TA/2008-09/071     | 220KV Bhiwandi-II  | -                           | -          | -          | -          | -          | Approved                       |
| 389    | SS/2007-08/015     | Contrld shunt reactor(CSR) 400KV DhuleSS   | -                           | -          | 0.79       | -          | -          | Approved                       |
| 390    | TA/2005-06/005     | 220KV Tembhurni SS   | -                           | -          | -          | -          | -          | Approved                       |
| 391    | AN/2007-08/007     | Evsn of Wind Energy in   | -                           | -          | -          | -          | -          | Approved                       |

| Sr. No | Project Definition | Scheme Name  | Capitalisation (Rs. Crores) |            |            |            |            | Status (Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|--------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                |
|        |                    | Nasik/Karad Zone   |                             |            |            |            |            |                                |
| 392    | SS/2010-11/022     | Estt. 100kV Agardanda SS To be considered as 220 KV Dighi (Raigad) | -                           | -          | -          | -          | -          | Approved                       |
| 393    | SS/2012-13/004     | 132 KV Pokharni SS   | -                           | -          | -          | -          | -          | Approved                       |
| 394    | SS/2011-12/007     | 132KV Waghluj dhanora (Ashti-II) SS                                | -                           | -          | -          | -          | -          | Approved                       |
| 395    | SS/2013-14/002     | 220 KV Manor S/stn   | -                           | -          | -          | -          | -          | Approved                       |
| 396    | LL/2016-17/005     | 220kV Lines of Nagpur RingMain BR 112/12                           | -                           | -          | -          | -          | -          | Approved                       |
| 397    | SS/2017-18/001     | 220/132 kV Kurunda s/s (GIS)                                       | -                           | -          | -          | -          | -          | Approved                       |
| 398    | LL/2017-18/003     | Cable frm 220kV Parvati to132kV Kothrud                            | -                           | -          | -          | -          | -          | Approved                       |
| 399    | SS/2014-15/006     | 132kV Bhugaon, Mulshi,Pune   | -                           | -          | -          | -          | -          | Approved                       |
| 400    | SS/2010-11/002     | Estt. of 220KV Bhiwandi-IV -Rajlaxmi S/S                           | -                           | -          | -          | -          | -          | Approved                       |
| 401    | AN/2015-16/029     | Shifitng 220kV lines Navi Mum I Airport                            | -                           | -          | 22.41      | -          | -          | Approved                       |
| 402    | SS/2010-11/013     | Estt. 220KV Jalna-MIDC (Nagewadi) SS                               | -                           | -          | -          | -          | 12.00      | Approved                       |
| 403    | SS/2010-11/014     | 132KV Pathra   | -                           | -          | -          | -          | -          | Approved                       |
| 404    | AN/2010-11/018     | Nashik Administrative Bldg   | 0.18                        | 0.01       | -          | -          | -          | Approved                       |
| 405    | LL/2011-12/010     | LILO on 132kV Shahda-Taloda 2nd Circuit                            | -                           | -          | -          | -          | -          | Approved                       |

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|--------|----------------------|--|-----------------------------|------------|------------|------------|------------|--------------------------------|
|        |                      |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                |
| 406    | SS/2011-12/024       | Estt.132KV Sarola s/s  | -                           | -          | -          | -          | -          | Approved                       |
| 407    | SS/2011-12/020       | Estt. of 220 KV EON KHARADI s/s  | 0.00                        | -          | -          | -          | -          | Approved                       |
| 408    | SS/2009-10/004       | 220KV Kadegaon SS  | 0.66                        | -          | -          | -          | -          | Approved                       |
| 409    | SS/2009-10/014       | 132KV MAHAKALA   | (0.83)                      | 0.70       | -          | -          | -          | Approved                       |
| 410    | LL/2008-09/009       | 132KV Ambad - 220KV Jalna SCDC Line                                      | -                           | -          | -          | -          | -          | Approved                       |
| 411    | SS/2008-09/013       | 220KV Rajgurunagar SS  | -                           | -          | -          | -          | -          | Approved                       |
| 412    | LL/2008-09/056       | 220KV Ghatodi-Wani LL  | -                           | -          | -          | -          | -          | Approved                       |
| 413    | Myt2017/LL61         | 132 kV Sicom - Mul   | -                           | -          | -          | -          | 7.88       | Approved                       |
| 414    | LL/2017-18/002       | 400kVDC frm PGCIL Shikrapur-Lonikand-II                                  | -                           | -          | -          | -          | -          | Approved                       |
| 415    | SS/220Adwadi(Sinnar) | 220 kV Adwadi (Sinnar)   | -                           | -          | -          | -          | 87.70      | Approved                       |
| 416    | SS/132Sinnar(Shaha)  | 132 kV Shaha) S/S  | -                           | -          | -          | -          | 49.15      | Approved                       |
| 417    | Myt2017/LL67         | 220 kV Lonideokar - Tembhruni line                                       | -                           | -          | -          | -          | 22.49      | Approved                       |
| 418    | Myt2017/LL26         | 132 kVAmbheri (Wind) - AundhSCDC line                                    | -                           | -          | -          | 15.00      | 2.10       | Approved                       |
| 419    | Myt2017/LL18         | 132 KV Wani - Pandharkawada D/c line                                     | -                           | -          | -          | 10.00      | 1.34       | Approved                       |
| 420    | Myt2017/LL24         | LILO on one ckt of 132 kV Ambad – Ghansawangi D/c line at 220 kV Partur. | -                           | -          | -          | 10.00      | 1.32       | Approved                       |
| 421    | Myt2017/LL57         | 132 kV Oglewadi –Kundal (Kirloskarwadi) at                               | -                           | -          | -          | -          | 6.93       | Approved                       |



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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | Kadegaon line  |                             |            |            |            |            |                                   |
| 422    | Myt2017/LL66       | LILO on 132kV Indapur-Ujani at 220kV Lonideokar                      | -                           | -          | -          | -          | 3.96       | Approved                          |
| 423    | Myt2017/LL14       | LILO on 132 kV Theur-Sanaswadi and Theur - Markal line on MC towers. | -                           | -          | -          | 2.20       | -          | Approved                          |
| 424    | LL/2016-17/002     | 220kV LILO Borivli-Boisar at Boisar PG                               | -                           | -          | -          | 1.68       | -          | Approved                          |
| 425    | Myt2017/LL4        | 132 kV D/C line from Garware (EHV Consumer) to Bajaj (EHV consumer)  | -                           | -          | -          | 1.32       | -          | Approved                          |
| 426    | Myt2017/LL13       | LILO of 132 KV Ganeshkhind Pawane at 132 KV Rahatani                 | -                           | -          | -          | 0.11       | -          | Approved                          |
| 427    | Myt2017/LL3        | 132kV Shendra - Chikaltahna line                                     | -                           | -          | -          | -          | -          | Approved                          |
| 428    | Myt2017/LL23       | LILO on one ckt of Padegaon -Paithan DC line at 220 kV Chitegaon.    | -                           | -          | -          | -          | -          | Approved                          |
| 429    | Myt2017/LL2        | Interlink of Waluj-Padegaon with Padegaon-Sawangi                    | -                           | -          | -          | -          | -          | Approved                          |
| 430    | LL/1997-98/001     | Link Lines under Nagpur Zone   | 2.85                        | -          | -          | -          | -          | Approved                          |
| 431    | LL/1996-97/001     | Line Works in Nagpur Zone  | -                           | -          | -          | -          | -          | Approved                          |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 432    | TR/2002-03/001     | 220KV Mudshingi SS   | -                           | -          | -          | -          | -          | Approved                          |
| 433    | SS/2004-05/009     | 132KV Velapur s/s  | -                           | 0.02       | -          | -          | -          | Approved                          |
| 434    | SS/2006-07/006     | <u>Establishment of 220/33KV at Wathar S/S Dist. Kolhapur.</u> | -                           | 0.06       | -          | -          | -          | Approved                          |
| 435    | SS/2007-08/011     | 132 KV Rajur SS (Aurangabas zone)                              | -                           | 0.82       | -          | -          | -          | Approved                          |
| 436    | SS/2009-10/005     | 132KV Shankarnagar SS  | -                           | 0.65       | -          | -          | -          | Approved                          |
| 437    | SS/2009-10/017     | 132 KV Ardhapur SS   | -                           | 0.06       | -          | -          | -          | Approved                          |
| 438    | TR/2017-18/001     | Rep. of T/Fs & 33kV Level creation, Wardha                     | -                           | -          | -          | -          | 15.78      | Approved                          |
| 439    | TR/2016-17/002     | Add. & Replace of T/Fs under Karad Zone                        | -                           | 0.04       | -          | 10.00      | 6.00       | Approved                          |
| 440    | TR/2016-17/001     | Aug. by add. & replace under Pune Zone                         | -                           | -          | -          | 5.00       | 7.10       | Approved                          |
| 441    | TR/2014-15/003     | Replacement of T/Fs under Nagpur Zone.                         | 2.35                        | 2.44       | -          | 10.00      | -          | Approved                          |
| 442    | TR/2012-13/011     | Replac./Addition of T/F , Kolhapur circle                      | 4.19                        | 10.53      | 0.14       | 8.38       | -          | Approved                          |
| 443    | TR/2012-13/010     | Aug by replace/addition under Vashi Zone                       | 0.05                        | 2.81       | 0.15       | -          | -          | Approved                          |
| 444    | TR/2012-13/009     | Replacement of T/F at 220kV Nalasopara                         | 0.84                        | 1.32       | 0.19       | -          | -          | Approved                          |
| 445    | TR/2012-13/008     | Aug by replace of T/F under Kalwa Circle                       | 9.97                        | 0.46       | 0.12       | 2.53       | -          | Approved                          |
| 446    | TR/2012-13/007     | Replac. of ICT at 400kV Khadka-Bhusaval                        | 0.33                        | -          | -          | -          | -          | Approved                          |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 447    | TR/2012-13/004     | Aug of Pishor, Pathri&Satara(Deolai) ss  | -                           | -          | -          | -          | -          | Approved                          |
| 448    | TR/2012-13/003     | Aug. by replacement under Aurangabad Zon | 0.09                        | -          | -          | -          | -          | Approved                          |
| 449    | TR/2011-12/009     | 220 KV KANHAN S/S, 132KV MOUDA & PARDI   | 0.18                        | 0.22       | -          | -          | -          | Approved                          |
| 450    | TR/2011-12/003     | 220 KV BHOSARI & CHINCHWAD S/S           | 1.12                        | 0.01       | -          | -          | -          | Approved                          |
| 451    | TR/2011-12/002     | 220 KV Khadki S/s & Parvati S/s          | 0.62                        | -          | -          | -          | -          | Approved                          |
| 452    | TR/2007-08/134     | 100 KV Thal Waishet-JBIC                 | -                           | -          | -          | -          | -          | Approved                          |
| 453    | TR/2007-08/125     | 220 KV Borivali-JBIC                     | 0.03                        | -          | -          | -          | -          | Approved                          |
| 454    | TR/2007-08/123     | 100 KV Ambernath -JBIC                   | -                           | -          | -          | -          | -          | Approved                          |
| 455    | TR/2007-08/113     | 132KV Sakri                              | -                           | 0.06       | -          | -          | -          | Approved                          |
| 456    | TR/2007-08/105     | 132KV Ambad                              | 0.25                        | -          | -          | -          | -          | Approved                          |
| 457    | TR/2007-08/091     | 220KV Chalisgaon                         | 0.01                        | 0.10       | -          | -          | -          | Approved                          |
| 458    | TR/2007-08/090     | 220KV Dhule                              | -                           | -          | -          | -          | -          | Approved                          |
| 459    | TR/2007-08/072     | 132KV Mangalwedha                        | 0.38                        | -          | -          | -          | -          | Approved                          |
| 460    | TR/2007-08/067     | 220KV Barshi                             | 1.00                        | -          | -          | -          | -          | Approved                          |
| 461    | TR/2007-08/066     | 220KV Pargaon(Kathapur)                  | -                           | -          | -          | -          | -          | Approved                          |
| 462    | TR/2007-08/065     | 220KV Ranjangaon                         | 0.01                        | -          | -          | -          | -          | Approved                          |
| 463    | TR/2007-08/049     | 110KV Puluj                              | 0.00                        | -          | -          | -          | -          | Approved                          |
| 464    | TR/2007-08/047     | 100KV Ganeshkhind                        | -                           | -          | -          | -          | -          | Approved                          |
| 465    | TR/2007-08/044     | 132KV Shirur                             | 0.02                        | -          | -          | -          | -          | Approved                          |
| 466    | TR/2007-08/042     | 132KV Kuruli                             | 0.00                        | -          | -          | -          | -          | Approved                          |
| 467    | TR/2007-08/041     | 220KV Jejuri                             | -                           | -          | -          | -          | -          | Approved                          |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 468    | TR/2007-08/040     | 220KV Baramati   | -                           | -          | -          | -          | -          | Approved                          |
| 469    | TR/2007-08/016     | 132 KV Boisar I (MIDC) - JBIC  | -                           | -          | -          | -          | -          | Approved                          |
| 470    | TR/2007-08/009     | 220 KV Padghe -JBIC  | 0.14                        | -          | -          | -          | -          | Approved                          |
| 471    | TR/2007-08/002     | 220 KV Trombay -JBIC   | 0.30                        | -          | -          | -          | -          | Approved                          |
| 472    | TR/2007-08/001     | 220 KV Kalwa - JBIC  | 0.10                        | -          | -          | -          | -          | Approved                          |
| 473    | TR/2007-08/063     | 132KV Kamthadi SS  | 0.49                        | -          | -          | -          | -          | Approved                          |
| 474    | TR/2007-08/068     | 220KV Jeur   | 0.93                        | -          | -          | -          | -          | Approved                          |
| 475    | TA/2017-18/004     | Add. of ICTs at 2Nos. of S/s, Pune Zone                                      | -                           | -          | -          | 10.00      | 44.51      | Approved                          |
| 476    | TA/2017-18/003     | Add. of T/Fs at 2Nos. of S/s, Nasik Zone                                     | -                           | -          | -          | -          | 10.60      | Approved                          |
| 477    | TA/2016-17/006     | Aug. by add. & replace under Vashi Zone                                      | -                           | -          | 4.34       | 1.66       | 40.00      | Approved                          |
| 478    | TA/2016-17/005     | Add. & Replace of T/Fs under Aurangabad                                      | -                           | -          | 6.29       | 3.71       | 30.00      | Approved                          |
| 479    | TA/2016-17/004     | Add. & Replace of T/Fs under Nagpur Zone                                     | -                           | -          | 2.23       | 7.77       | 20.00      | Approved                          |
| 480    | TA/2015-16/012     | Addition/replacement of ICTS,Nasik Zone                                      | -                           | 3.63       | 6.28       | 10.00      | 22.00      | Approved                          |
| 481    | TA/2015-16/008     | Augmentation by addition of 3x105 MVA, 400/220/33 KV ICT at 400 kV Akola S/s | -                           | 9.35       | 1.91       | 15.00      | 4.00       | Approved                          |
| 482    | TA/2015-16/006     | Augmentation scheme at various substations under Amravati Zone               | -                           | -          | 4.50       | 20.00      | 2.00       | Approved                          |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|--------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                |
| 483    | TA/2015-16/005     | Aug by addi & replace. T/F , Nashik Zone   | -                           | 3.25       | 4.45       | 20.00      | 43.46      | Approved                       |
| 484    | TA/2015-16/004     | Aug by addition & replace. T/F PuneZone.<br>1) 132kV Bawada<br>2) 132kV Whirlpool<br>Replacement of 2 x 25MVA, 132/33kV T/Fs by 2 X 50MVA, 132/33kV T/Fs at 132kV Bawada S/S | -                           | -          | 3.60       | 1.40       | 5.33       | Approved                       |
| 485    | TA/2015-16/003     | Aug.by additional T/Fs under Vashi Zone  | -                           | 4.77       | 1.76       | 3.94       | -          | Approved                       |
| 486    | TA/2015-16/002     | 3x167 MVA, 400/220 KV ICT at 400 kV RS kalwa S/s   | -                           | -          | 0.97       | 16.00      | 13.00      | Approved                       |
| 487    | TA/2015-16/001     | Additional ICT at 400kV Babhaleshwar S/s   | -                           | 8.23       | 2.57       | 26.00      | -          | Approved                       |
| 488    | TA/2013-14/004     | Additional T/f at 220kV Pal Dombivali  | 8.73                        | 0.55       | -          | -          | -          | Approved                       |
| 489    | TA/2012-13/005     | Aug of S/S under Karad Circle  | 0.88                        | 2.55       | 9.87       | 9.00       | -          | Approved                       |
| 490    | TA/2012-13/004     | Aug by replace/addition under Pune zone  | 1.99                        | 7.99       | 0.16       | 15.00      | -          | Approved                       |
| 491    | TA/2011-12/009     | 220KV SERUM S/S  | 4.50                        | 0.34       | -          | -          | -          | Approved                       |
| 492    | TA/2008-09/048     | 400KV Bab'war & Dhule SS   | 1.09                        | -          | -          | -          | -          | Approved                       |
| 493    | TA/2011-12/013     | 132 KV Satpur MIDC s/s,  | 0.08                        | 0.06       | -          | -          | -          | Approved                       |

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|--------|--------------------|---|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | District-Nashik                                     |                             |            |            |            |            |                                   |
| 494    | TA/2011-12/006     | Aug 400 Kv S/Stn Padghe                             | 1.05                        | 0.25       | -          | -          | -          | Approved                          |
| 495    | TA/2010-11/002     | Procurement of spare ICTs for MSETCL for Nasik Zone | 7.49                        | -          | -          | -          | -          | Approved                          |
| 496    | LE/2008-09/023     | Rep. of equipts at O&M Cr. Aurangabad               | -                           | -          | -          | -          | -          | Approved                          |
| 497    | LE/2008-09/019     | LE 11KV I/D to O/DSwgr for 66KV S/S                 | 0.02                        | -          | -          | -          | -          | Approved                          |
| 498    | LE/2008-09/018     | LE 11KV I/D to O/DSwgr Bhandara Dn                  | 0.03                        | -          | -          | -          | -          | Approved                          |
| 499    | LE/2008-09/017     | LE 11KV I/D to O/D Swgr Nagpur Dn                   | 0.00                        | 0.01       | -          | -          | -          | Approved                          |
| 500    | LE/2008-09/016     | LE Tr. O&M Dn Amaravati                             | 0.43                        | -          | -          | -          | -          | Approved                          |
| 501    | LE/2008-09/015     | LE Tr. O&M Dn Akola                                 | 2.27                        | 0.03       | 0.36       | -          | -          | Approved                          |
| 502    | LE/2008-09/008     | LE for Trans O&M Dn Ratnagiri                       | 0.08                        | -          | -          | -          | -          | Approved                          |
| 503    | LE/2007-08/009     | LES for 11KV I/D To O/D Switchgear                  | 0.01                        | -          | -          | -          | -          | Approved                          |
| 504    | LE/2007-08/005     | LE 220kv Ichalkaranji I/D-O/D Swgr                  | 0.40                        | 0.05       | -          | -          | -          | Approved                          |
| 505    | LE/2017-18/005     | 2nd Ckt.Stringing underAurangabad Circle            | -                           | -          | -          | -          | -          | Approved                          |
| 506    | LE/2017-18/004     | 2nd Ckt.Stringing under Parli Circle                | -                           | -          | -          | -          | -          | Approved                          |
| 507    | LE/2017-18/003     | 2nd Ckt. stringing under Akola & Amravati           | -                           | -          | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name  | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 508    | LE/2017-18/002     | 2nd Ckt. stringing under Bhusawal Circle   | -                           | -          | -          | -          | -          | Approved                          |
| 509    | LE/2017-18/001     | 2nd Ckt. stringing under Nashik  | -                           | -          | -          | -          | -          | Approved                          |
| 510    | LE/2016-17/007     | Rep of cond by HAC Abd jalna- Mide   | -                           | -          | -          | -          | -          | Approved                          |
| 511    | LE/2014-15/005     | Rep of Disc insulators of 400kV Lines  | 2.08                        | 6.05       | -          | 2.00       | -          | Approved                          |
| 512    | LE/2012-13/016     | Rep of cond,E/W,Disc insu,re-earthing work of lines in,Rattnagiri Dn.  | -                           | -          | -          | 14.00      | 9.00       | Approved                          |
| 513    | LE/2012-13/003     | Life Extension scheme for replacement of old equipments at various EHV sub-stations under EHV O&M division Beed. | 3.22                        | 0.33       | -          | -          | -          | Approved                          |
| 514    | LE/2011-12/019     | Rep of 66kV & 220/132kV Eqp Chndpur cl   | -                           | 0.00       | -          | -          | -          | Approved                          |
| 515    | LE/2010-11/014     | Repl of SS materials under JAICA phse-II   | 2.09                        | 1.42       | 0.01       | -          | -          | Approved                          |
| 516    | LE/2010-11/013     | LE-Repl. of equip 400KV RSO&M Dn Kalwa   | 0.02                        | -          | -          | -          | -          | Approved                          |
| 517    | LE/2010-11/004     | Conv'sn of 11KV I/Dto O/D Switchgear(Pune)   | 0.71                        | 0.05       | -          | -          | -          | Approved                          |
| 518    | LE/2010-11/001     | LE-Repl. of old equip O&M Circle Panvel  | 0.01                        | -          | -          | -          | -          | Approved                          |
| 519    | LE/2008-09/025     | LE Schems For  | 0.00                        | -          | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name  | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | Babhaleshwar Dn  |                             |            |            |            |            |                                   |
| 520    | LE/2007-08/008     | LE scheme for Trans. O&M Dn Parbhani                           | 0.31                        | -          | -          | -          | -          | Approved                          |
| 521    | LE/2004-05/006     | R&M of 220KV Chinchwad SS                                      | 0.25                        | 6.57       | 3.47       | -          | -          | Approved                          |
| 522    | LE/2004-05/005     | R&M schemes in O&M Pune Cr                                     | 0.09                        | -          | -          | -          | -          | Approved                          |
| 523    | LE/2002-03/001     | LE for various EHV S/S & Lns                                   | -                           | -          | -          | -          | -          | Approved                          |
| 524    | LE/2000-01/001     | Rep. of existing equip. in Amravati Zn                         | 0.18                        | -          | -          | -          | -          | Approved                          |
| 525    | LE/2008-09/028     | Repl. of various SS Equip. under O&M Latur                     | 0.05                        | -          | -          | -          | -          | Approved                          |
| 526    | LE/2008-09/022     | Repl. of equip. under O&M Dn Latur                             | 0.40                        | -          | -          | -          | -          | Approved                          |
| 527    | LE/2006-07/002     | LE Repl of Eqpts Tr. O&M Cr Amaravati                          | 0.07                        | -          | -          | -          | -          | Approved                          |
| 528    | LE/2010-11/009     | Repl of old equip. at 400KV Chandrapur                         | -                           | -          | -          | -          | -          | Approved                          |
| 529    | LE/2009-10/009     | Conversion of 220kV Isolator from double break to single break | -                           | 0.43       | -          | -          | -          | Approved                          |
| 530    | LE/2008-09/034     | Repl. of old BBP schemes in Nasik Zone                         | -                           | -          | -          | -          | -          | Approved                          |
| 531    | LE/2008-09/031     | Repl of BBP scheme at Kalwa                                    | -                           | -          | -          | -          | -          | Approved                          |
| 532    | LE/2008-09/029     | Repl. of old BBP scheme at                                     | 0.20                        | -          | -          | -          | -          | Approved                          |



| Sr. No | Project Definition | Scheme Name                                     | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|---|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | Parli   |                             |            |            |            |            |                                   |
| 533    | LE/2013-14/015     | Rplc of old BB prot scheme by Numeric BB        | 0.05                        | 0.44       | 4.02       | -          | -          | Approved                          |
| 534    | AN/2016-17/039     | Const. of 68 nos. new 33kV bays,Abd zone        | -                           | -          | -          | 12.00      | 13.42      | Approved                          |
| 535    | AN/2016-17/037     | Addition of 54 nos. 33kV bays,Nsk zone          | -                           | -          | 0.85       | 10.00      | 12.61      | Approved                          |
| 536    | AN/2016-17/027     | Busbar Protection Schemes for 400 kV S/s        | -                           | -          | -          | 6.00       | 4.46       | Approved                          |
| 537    | AN/2013-14/013     | Hybrid Switchgear for Nagpur zone               | -                           | -          | 8.00       | 4.83       | -          | Approved                          |
| 538    | AN/2010-11/022     | Instll. of Ni Injection System in All Zones.    | 0.26                        | 0.43       | -          | -          | -          | Approved                          |
| 539    | AN/2010-11/008     | Supply & Retrofit of old protn schemes          | 0.05                        | -          | -          | -          | -          | Approved                          |
| 540    | AN/2009-10/024     | Even of power-Gupta (GEPL) Usegaon,C'pur        | -                           | -          | -          | -          | -          | Approved                          |
| 541    | AN/2008-09/021     | Retrofit of old Distance Relay by Numrel relays | 0.05                        | 0.02       | 0.01       | -          | -          | Approved                          |
| 542    | AN/2008-09/002     | Providing shunt capacitor in var. Zones         | (0.20)                      | (0.21)     | -          | -          | -          | Approved                          |
| 543    | AN/2007-08/003     | PLCC Commn. N/wk of Data & Voice                | 0.14                        | -          | -          | -          | -          | Approved                          |
| 544    | AN/2007-08/002     | ERP & MIS                                       | -                           | -          | -          | -          | -          | Approved                          |
| 545    | AN/2007-08/001     | RTU SCADA & DC                                  | 0.87                        | 0.26       | 0.59       | -          | -          | Approved                          |
| 546    | AN/2006-07/003     | Substation Monitoring System                    | 0.81                        | 0.04       | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name  | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
| 547    | AN/2006-07/002     | Proc & Instl of 420 Reactor-Padge/Khrgr  | 0.01                        | -          | -          | -          | -          | Approved                          |
| 548    | AN/2006-07/001     | ABT Metering System  | 0.03                        | 0.09       | -          | -          | -          | Approved                          |
| 549    | AN/2005-06/002     | 80MVAR Reactor at 400KV Karad  | -                           | 0.40       | -          | -          | -          | Approved                          |
| 550    | AN/2005-06/001     | ABT Metering & VSAT Commn.   | 0.17                        | -          | -          | -          | -          | Approved                          |
| 551    | AN/2015-16/037     | Const. of 27 nos new 33kV bays,Amt zone  | -                           | -          | -          | -          | -          | Approved                          |
| 552    | AN/2015-16/026     | Shifting of Reactor at 400kV Chandrapur  | -                           | -          | 9.75       | -          | -          | Approved                          |
| 553    | AN/2016-17/026     | 33kV Capacitor bank at Bhusawal CircleP2   | -                           | -          | 0.66       | -          | -          | Approved                          |
| 554    | AN/2016-17/025     | 33kV Cap Bank Nashik Circle P2   | -                           | -          | 1.83       | -          | -          | Approved                          |
| 555    | SS/1999-00/003     | 220 kV Satara MIDC S/S   | -                           | -          | -          | -          | -          | Approved                          |
| 556    | AN/2012-13/010     | Installation of 125 MVAR 400 KV Bus Shunt Reactor bay at 400 KV Solapur (Lamboti) Substation | -                           | -          | 13.30      | -          | -          | Approved                          |
| 557    | TA/2017-18/005     | AUG BY ADD OF T/F AT WAI SS KARAD  | -                           | -          | -          | -          | -          | Approved                          |
| 558    | LL/2016-17/008     | LILO-Parli-Harangul&Parli-Osmanabd   | -                           | -          | -          | -          | -          | Approved                          |
| 559    | LL/2017-18/009     | Ambheri-Aundh 132kV SCDC Line  | -                           | -          | -          | -          | -          | Approved                          |
| 560    | SS/2017-18/006     | 132kV Chamorshi  | -                           | -          | -          | -          | -          | Approved                          |

| Sr. No | Project Definition | Scheme Name                                     | Capitalisation (Rs. Crores) |            |            |            |            | Status<br>(Approved / Disallowed) |
|--------|--------------------|---|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | SS,Gadchiroli                                   |                             |            |            |            |            |                                   |
| 561    | SS/2017-18/007     | 132 kV Sicom - Mul                              | -                           | -          | -          | -          | -          | Approved                          |
| 562    | SS/2017-18/009     | Estt. 132kV Kothali (Nagardeola)-Rev&Mod        | -                           | -          | -          | -          | -          | Approved                          |
| 563    |                    | Lilo-Ambad-Ghansawali DC Line at 220 kV Partur  | -                           | -          | -          | -          | -          | Approved                          |
| 564    |                    | Lilo-132kV Indapur - Ujani at 220 kV Lonideokar | -                           | -          | -          | -          | -          | Approved                          |
| 565    | LL/2008-09/064     | 220KV Karad-Koyna LL                            | -                           | 37.83      | -          | -          | -          | Approved                          |
| 566    | SS/2013-14/001     | 220kV Kudus/Wada-II/Bhaveghar S/S-Mod           | 21.66                       | 4.80       | 0.81       | -          | -          | Approved                          |
| 567    | SS/2007-08/005     | Estt. of 220KV Kudus S/S (Wada-II)              | 1.76                        | -          | -          | -          | -          | Approved                          |
| 568    | SS/2005-06/001     | Estt. of 220KV Vasai S/S                        | -                           | -          | -          | -          | -          | Approved                          |
| 569    | TA/2016-17/001     | Add. ICT at 400kV Jejuri Pune zone              | -                           | -          | 17.58      | 3.50       | 10.00      | Approved                          |
| 570    | SS/2008-09/041     | 220KV Kalwan SS                                 | -                           | -          | 3.45       | -          | -          | Approved                          |
| 571    | SS/2008-09/055     | 132KV Bharsingi SS                              | -                           | -          | 24.95      | -          | -          | Approved                          |
| 572    | LL/2008-09/068     | 110KV Ln fr 220KV O'wadi-110KV Mayni            | -                           | -          | -          | 6.80       | -          | Approved                          |
| 573    | LL/2008-09/125     | 132Kv Kankawali- Kudal Line                     | -                           | -          | -          | 2.18       | 0.22       | Approved                          |
| 574    | SS/2010-11/016     | 220KV Vairag (Rev 2013-14)                      | -                           | 29.27      | 8.03       | 2.52       | -          | Approved                          |
| 575    | SS/2011-12/017     | Estt. 132KV at Bhusawal SS                      | -                           | 17.47      | 1.64       | -          | -          | Approved                          |
| 576    | SS/2010-11/004     | Estt. of 400KV Kudus S/S                        | -                           | -          | -          | -          | 163.68     | Approved                          |

| Sr. No | Project Definition | Scheme Name   | Capitalisation (Rs. Crores) |                 |                 |               |                 | Status<br>(Approved / Disallowed) |
|--------|--------------------|---|-----------------------------|-----------------|-----------------|---------------|-----------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17      | FY 2017-18      | FY 2018-19    | FY 2019-20      |                                   |
| 577    | LL/2010-11/019     | LL from 400kV PGCIL - 220kV Hinjewadi-II  | -                           | -               | -               | 20.77         | 4.80            | Approved                          |
| 578    | TA/2008-09/014     | 220KV Theur SS  | -                           | -               | 4.42            | 3.20          | -               | Approved                          |
| 579    | LL/2011-12/007     | 132 KV DCDC Daund - Shirgonda LL  | -                           | -               | -               | 12.87         | -               | Approved                          |
| 580    | SS/2008-09/046     | 132KV Jat-tarodi SS   | -                           | -               | -               | -             | 12.60           | Approved                          |
| 581    | SS/2015-16/005     | Estt.of 220/33kV s/s at Ner   | -                           | -               | -               | 24.01         | 3.99            | Approved                          |
| 582    | TR/2015-16/003     | 3x167 MVA, 400/220 KV ICT at 400 kV Padghe S/s  | -                           | -               | 8.03            | 20.00         | 9.93            | Approved                          |
| 583    | TR/2008-09/073     | 132KV Yavat SS  | 1.04                        | -               | -               | -             | -               | Approved                          |
| 584    | LE/2011-12/017     | Life Extension scheme for replacement of old equipments at various EHV sub-stations under EHV O&M division, Latur | -                           | 6.09            | -               | 7.00          | -               | Approved                          |
|        |                    | <b>Approved Total</b>   | <b>1,843.35</b>             | <b>1,521.82</b> | <b>1,140.35</b> | <b>920.04</b> | <b>1,360.00</b> |                                   |
| 585    | SS/2013-14/008     | 33kV at 400kV Hinjewadi GIS SS  | -                           | -               | -               | -             | -               | Disallowed                        |
| 586    | EV/2009-10/001     | 400KV Warora SS   | 14.19                       | 8.11            | 0.40            | 0.70          | -               | Disallowed                        |
| 587    | TA/2008-09/066     | 132KV Ahmedpur  | 0.05                        | -               | -               | -             | -               | Disallowed                        |
| 588    | AN/2012-13/007     | 125MVAR bus shunt reactor bay at Warora   | 1.06                        | 0.48            | -               | -             | -               | Disallowed                        |
| 589    | SS/2013-14/005     | Inst & Repl 220/22/22kV Hinjewadi-II  | -                           | 0.77            | 0.87            | -             | -               | Disallowed                        |
| 590    | SS/2013-14/020     | 132kV Shiradwad GIS,Kolhapur-Rev  | 0.24                        | 0.28            | -               | -             | -               | Disallowed                        |
| 591    | SS/2007-08/002     | Estt. of 220KV Bapgaon  | 0.06                        | 0.07            | 0.51            | -             | -               | Disallowed                        |

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|--------|--------------------|--|-----------------------------|------------|------------|------------|------------|-----------------------------------|
|        |                    |  | FY 2015-16                  | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |                                   |
|        |                    | S/S                                      |                             |            |            |            |            |                                   |
| 592    | SS/2010-11/010     | Estt. of 220 KV Palghar s/s              | 0.12                        | -          | -          | -          | -          | Disallowed                        |
| 593    | SS/2013-14/022     | Estab. of 132 kV Kanashi SS              | 0.06                        | -          | -          | -          | -          | Disallowed                        |
| 594    | SS/2010-11/001     | Estt. of 132KV Dapcheri S/S              | 0.04                        | -          | -          | -          | -          | Disallowed                        |
| 595    | SS/2014-15/005     | 132KV LEVEL AT 400KV LONIKAND SS,PUNE    | 0.01                        | -          | -          | -          | -          | Disallowed                        |
| 596    | LL/2008-09/114     | 132KV Narsi-Mukhed SCDC Line             | 1.13                        | 0.10       | -          | -          | -          | Disallowed                        |
| 597    | SS/2008-09/004     | Estt. of 132KV Bibviewadi                | 0.63                        | -          | -          | -          | -          | Disallowed                        |
| 598    | SS/2009-10/016     | 132KV Mahur                              | 0.01                        | -          | -          | -          | -          | Disallowed                        |
| 599    | SS/2013-14/023     | Establishment of 220/22kV GIS s/s at EON | -                           | 0.22       | -          | -          | -          | Disallowed                        |
| 600    | TA/2012-13/001     | Aug. of various ss under Nasik Zone by   | 6.95                        | 7.02       | -          | -          | -          | Disallowed                        |
| 601    | TA/2011-12/014     | Aug of ss under Nasik Zone               | 0.92                        | -          | -          | -          | -          | Disallowed                        |
| 602    | AN/2009-10/029     | Even-Urjankur Tatyasaheb, Kolhapur       | -                           | 0.03       | -          | -          | -          | Disallowed                        |
| 603    | SS/2008-09/068     | 220 KV Narsi                             | 3.29                        | 1.27       | -          | -          | -          | Disallowed                        |
| 604    | SS/2008-09/031     | 220KV Warud SS                           | 1.12                        | 1.07       | 1.42       | 3.36       | 0.53       | Disallowed                        |
| 605    | SS/2008-09/017     | 220KV Lonand MIDC SS                     | 25.73                       | 3.17       | 0.14       | 0.95       | -          | Disallowed                        |
| 606    | SS/2008-09/037     | 220KV Pimpalgaon (Ranwad) SS             | 5.90                        | 3.84       | -          | -          | -          | Disallowed                        |
| 607    | SS/2008-09/056     | 220KV Katol SS                           | -                           | 0.14       | -          | -          | -          | Disallowed                        |
| 608    | LL/2008-09/069     | 110KV Ln fr 220KV I'Karnji-110KV Kurndwd | -                           | 0.11       | -          | -          | -          | Disallowed                        |

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|--------|--------------------|---|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------------------------|
|        |                    |   | FY 2015-16                  | FY 2016-17      | FY 2017-18      | FY 2018-19      | FY 2019-20      |                                   |
| 609    | LL/2008-09/070     | 110KV Miraj-Jaisingpur                      | 0.06                        | 0.79            | -               | -               | -               | Disallowed                        |
| 610    | SS/2011-12/003     | 400KV Jejuri-Winjhar DC Ln                  | 46.84                       | 9.31            | (4.26)          | 95.00           | 35.37           | Disallowed                        |
| 611    | EV/2008-09/001     | Evacuato of power Uran CCCP                 | 1.87                        | -               | -               | -               | -               | Disallowed                        |
| 612    | SS/2007-08/018     | 132KV Barshi-Takli SS                       | 0.04                        | 0.85            | -               | -               | -               | Disallowed                        |
| 613    | SS/2011-12/022     | 220KV Sangli SS                             | 0.56                        | 0.00            | -               | -               | -               | Disallowed                        |
| 614    | SS/2011-12/012     | 132KV Khanapur SS                           | 0.45                        | 0.01            | -               | -               | -               | Disallowed                        |
| 615    | SS/2006-07/013     | 132KV Shelu SS                              | -                           | 0.41            | -               | -               | -               | Disallowed                        |
| 616    | SS/2011-12/010     | Estt. of 220 KV MALIKPETH s/s               | -                           | -               | -               | -               | -               | Disallowed                        |
| 617    | SS/2013-14/010     | 220kv Nandgaon Peth (Textile Park S/Stn)    | -                           | -               | -               | -               | -               | Disallowed                        |
| 618    | SS/2012-13/008     | Establishment 132/33kv substation at Dhanki | -                           | -               | -               | -               | -               | Disallowed                        |
| 619    | SS/2012-13/001     | 132 KV Mhaswad SS                           | -                           | -               | -               | -               | -               | Disallowed                        |
| 620    | SS/2012-13/002     | 220KV Mukhai                                | -                           | -               | -               | -               | -               | Disallowed                        |
|        |                    | <b>Disallowed Total</b>                     | <b>111.34</b>               | <b>38.03</b>    | <b>(0.91)</b>   | <b>100.01</b>   | <b>35.90</b>    |                                   |
|        |                    | <b>Grand Total</b>                          | <b>1,954.69</b>             | <b>1,559.85</b> | <b>1,139.44</b> | <b>1,020.06</b> | <b>1,395.90</b> |                                   |

*Note: There are certain schemes where nil capitalisation is claimed by MSETCL and also approved in this Order. This is on account of such schemes being closed by MSETCL and no capitalisation claimed by MSETCL in future years.*