Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 103 of 2009

IN THE MATTER OF
Maharashtra State Electricity Transmission Company Ltd.'s (MSETCL) Petition for Truing-up of Aggregate Revenue Requirement for FY 2008-09, approval of Annual Performance Review for FY 2009-10 and Aggregate Revenue Requirement for FY 2010-11

Shri V. P. Raja, Chairman
Shri S. B. Kulkarni, Member
Shri V. L. Sonavane, Member

O R D E R

Date: September 10, 2010

In accordance with the MERC Tariff Regulations and upon directions from the Maharashtra Electricity Regulatory Commission (Commission), the Maharashtra State Electricity Transmission Company Ltd. (MSETCL), submitted its Petition for approval of Annual Performance Review (APR) for FY 2009-10 and Aggregate Revenue Requirement (ARR) for FY 2010-11, on affidavit. The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003) and all other powers enabling it in this behalf, and after taking into consideration all the submissions made by MSETCL, all the objections and comments of the public, responses of MSETCL, issues raised during the Public Hearing, and all other relevant material, and after review of Annual Performance for FY 2009-10, determines the revenue requirement for MSETCL for FY 2010-11, as under:

Table of Contents

List of Abbreviations

ABT	Availability Based Tariff
A&G	Administration & General Expenses
AAD	Advance Against Depreciation
ARR	Aggregate Revenue Requirement
CERC	Central Electricity Regulatory Commission
Commission/MERC	Maharashtra Electricity Regulatory Commission
CPI	Consumer Price Index
Cr	Crore
DA	Dearness Allowance
EA 2003/ Act	Electricity Act, 2003
EHV	Extra High Voltage
FY	Financial Year
GFA	Gross Fixed Assets
GoM	Government of Maharashtra
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
kV	kilo Volt
kW	kilo Watt
MoP	Ministry of Power
MSEB	Maharashtra State Electricity Board
MSETCL	Maharashtra State Electricity Transmission Company Limited
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MSPGCL	Maharashtra State Power Generation Company Limited
MU	Million Units (MkWh)
MVA	Mega-Volt Ampere
MW	Mega Watt
MYT	Multi Year Tariff

NFA	Net Fixed Assets
R&M	Repairs & Maintenance
REL	Reliance Energy Limited
RoE	Return on Equity
Rs.	Indian Rupees
SLDC	State Load Despatch Centre
STU	State Transmission Utility
TBIA	Thane Belapur Industries Association
TPC	The Tata Power Company Limited
YTM	Yield to Maturity
Y-o-Y	Year-on-Year

1 BACKGROUND AND BRIEF HISTORY

This Order relates to the Petition filed by the Maharashtra State Electricity Transmission Company Limited (MSETCL) for approval of Annual Performance Review (APR) for FY 2009-10 and determination of revenue requirement for FY 2010-11.

MSETCL is a Company formed under the Government of Maharashtra (GoM) General Resolution No. ELA-1003/P.K.8588/Bhag-2/Urja-5 dated January 24, 2005 with effect from June 6, 2005 according to the provisions envisaged in the Electricity Act, 2003 (EA 2003). MSETCL has been registered with the Registrar of Companies, Mumbai on May 31, 2005 bearing certificate U40109 MH 2005 PLC 153646 under the Companies Act, 1956.

The provisional Transfer Scheme was notified under Section 131(5)(g) of the EA 2003 on June 6, 2005, which resulted in the creation of following four successor Companies and MSEB residual Company, of the erstwhile Maharashtra State Electricity Board (MSEB), namely,

- MSEB Holding Company Ltd.,
- Maharashtra State Power Generation Company Ltd.,
- Maharashtra State Electricity Transmission Company Ltd., and
- Maharashtra State Electricity Distribution Company Ltd.

MSETCL is in the business of transmission of electricity within the State of Maharashtra, and has also been notified as the State Transmission Utility (STU) as per Section 39 of the EA 2003.

1.1 TARIFF REGULATIONS

The Commission, in exercise of the powers conferred by the Electricity Act, 2003, notified the Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005 (hereinafter referred as MERC Tariff Regulations), on August 26, 2005. These Regulations superseded the MERC (Terms and Conditions of Tariff) Regulations, 2004.

1.2 COMMISSION'S ORDER ON ARR PETITION FOR FY 2005-06 AND FY 2006-07

MSETCL submitted its ARR Petition for FY 2005-06 and FY 2006-07 on February 9, 2006 (numbered as Case No. 49 of 2005). The Commission issued the Order on the abovementioned ARR Petition of MSETCL on June 28, 2006.

1.3 REVIEW PETITION ON ORDER FOR FY 2006-07

MSETCL filed a Review Petition on the above said Commission's Order (numbered as Case No. 21 of 2006). The Commission disposed off the Review Petition through its Order dated October 19, 2006.

1.4 COMMISSION'S ORDER ON MYT PETITION OF MSETCL FOR FY 2007-08 TO FY 2009-10

MSETCL submitted its MYT Petition on February 2, 2007, under affidavit. The MYT Petition was admitted by the Commission on February 7, 2007. The Commission issued the MYT Order for MSETCL for the first Control Period, i.e., FY 2007-08 to FY 2009-10, on April 2, 2007, which came into effect from April 1, 2007, and the Transmission tariff for the intra-State transmission system (InSTS) was determined separately through Transmission Tariff Order dated April 2, 2007 in Case No. 86 of 2006, which was valid upto March 31, 2008. As the Annual Performance Review for FY 2007-08 and tariff determination for FY 2008-09 were under process, the various Utilities filed Petitions for continuation of tariff determined for FY 2007-08 till the time of issuance of the respective Tariff Orders of each Utility. Accordingly, the Commission through its Order dated April 1, 2008, extended the applicability of the aforesaid Tariff Orders for the Utilities till the revised tariffs were determined for FY 2008-09 under the APR framework and Orders issued thereunder.

1.5 ATE JUDGMENT

MSETCL filed an Appeal on May 12, 2007, before the Honourable Appellate Tribunal for Electricity (ATE), viz., Appeal No. 76 of 2007, on the Commission's MYT Order for the first Control Period from FY 2007-08 to FY 2009-10, seeking relief on certain expenses disallowed/ partly allowed by the Commission. MSETCL challenged the Commission's MYT Order on the issues of:

- Truing up of A&G expenses for FY 2005-06
- Disallowance of significant portion of Operation & Maintenance expenses over the Control Period
- Disallowance of significant portion of employee expenses over the Control Period

- Disallowance of significant portion of Repair & Maintenance expenses over the Control Period
- Disallowance of significant portion of interest expenses over the Control Period
- Reduction in the capital expenditure and corresponding reduction in return on equity.

The ATE passed its Judgment on MSETCL's Appeal on October 1, 2007. The ATE's ruling on various aspects raised in MSETCL's Appeals have been summarised below:

- Truing up of A&G expenses for FY 2005-06 shall be done based on actuals, subject to prudence check.
- As regards employee expenses, A&G expenses and R&M expenses for the Control Period from FY 2007-08 to FY 2009-10
    - Actual expenditure for the purposes of truing up for FY 2006-07 shall be considered subject to prudence check along with Annual Performance Review.
    - Projections of ARR for the Control Period for the aforesaid heads shall be done by extrapolating the actual audited expenses for FY 2006-07 subject to prudence check and the same approach shall be followed for the subsequent years till norms are finalized.
    - As regards rate of interest and calculation of GFA is concerned, the same shall be considered and dealt with along with the aforesaid points subject to such details as the Commission may require.
    - Consequential changes, if any, in the tariff for FY 2007-08 and subsequent years shall be carried out based on the aforesaid.

1.6 PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2007-08 AND DETERMINATION OF REVENUE REQUIREMENT FOR FY 2008-09

MSETCL submitted its Petition for approval of Annual Performance Review (APR) for FY 2007-08 and Revenue Requirement for FY 2008-09 on November 30, 2007 (numbered as Case No. 70 of 2007). The Commission issued the APR Order for MSETCL on May 31, 2008, which came into effect from June 1, 2008. Further, Transmission Tariff for InSTS for FY 2008-09 was determined through separate Order dated May 31, 2008 in Case No. 104 of 2007.

1.7 REVIEW PETITION ON ORDER ON APR FOR FY 2007-08 AND DETERMINATION OF REVENUE REQUIREMENT FOR FY 2008-09

Subsequent to the ARR Order and the Transmission Tariff for FY 2008-09, MSETCL filed a review petition dated July 7, 2008, seeking review of interest expenses allowed by the Commission in the Order (numbered as Case No. 40 of 2008). The Commission passed an Order dated September 12, 2008 on the above Review Petition, and ruled that the interest expenses of Rs 2.82 Crore related to LIC debt restructuring premium would be considered in the APR Petition of MSETCL for FY 2008-09. Accordingly, the Commission incorporated the impact of the same in the APR Order for MSETCL on May 28, 2009.

1.8 PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2008-09 AND DETERMINATION OF REVENUE REQUIREMENT FOR FY 2009-10

MSETCL submitted its Petition for approval of Annual Performance Review (APR) for FY 2008-09 and Revenue Requirement for FY 2009-10 on November 28, 2008 (numbered as Case No. 114 of 2008). The Commission issued the APR Order for MSETCL on May 28, 2009, which came into effect from June 1, 2009. Further, Transmission Tariff for InSTS for FY 2009-10 was determined through separate Order dated May 28, 2009 in Case No. 155 of 2008. MSETCL has appealed against the Commission’s Order on APR for FY 2008-09 and determination of ARR for FY 2009-10 before the ATE (numbered as Appeal No. 139 of 2009). The ATE’s decision on MSETCL’s Appeal is awaited.

1.9 PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2009-10 AND DETERMINATION OF REVENUE REQUIREMENT FOR FY 2010-11

As per the MERC Tariff Regulations, application for the determination of tariff is required to be made to the Commission not less than 120 days before the date from when the tariff is intended to be made effective. Further, the first proviso to Regulation 9.1 of the MERC Tariff Regulations states that the “*date of receipt of application for the purpose of this Regulation shall be the date of intimation about receipt of a complete application in accordance with Regulation 8.4 above*.”

In view of the separate process being undertaken by the Commission for formulation of the MERC MYT Regulations for the Control Period from FY 2011-12 to FY 2015-16, the Commission directed MSETCL to submit the Petition for truing up for FY 2008-09, APR for

FY 2009-10 and determination of revenue requirement for FY 2010-11 for its Transmission Business, latest by December 31, 2009.

MSETCL submitted its Petition for Annual Performance Review for FY 2009-10 and determination of revenue requirement for FY 2010-11 on January 30, 2010, based on actual audited expenditure for FY 2008-09, actual expenditure for first half of FY 2009-10, i.e., from April to September 2009 and revised estimated expenses for October 2009 to March 2010, and projections for FY 2010-11. MSETCL, in its Petition, requested the Commission to

- Approve the ARR proposed by MSETCL for FY 2008-09, FY 2009-10 and FY 2010-11 in accordance with the submissions and rationale given in the Petition;
- Approve the true up and adjustments pertaining to prior period expenses and performance review of the FY 2009-10 along with revenue requirement of FY 2010-11 as per the Petition.

The Commission, vide its letter dated February 23, 2010, forwarded the preliminary data gaps and information required from MSETCL. MSETCL submitted its replies to preliminary data gaps and information requirement on March 2, 2010.

The Commission scheduled a Technical Validation Session (TVS) on MSETCL's Petition for APR for FY 2009-10 and Revenue Requirement for FY 2010-11, on March 3, 2010, in the presence of Consumer Representatives authorised under Section 94(3) of the Electricity Act, 2003 to represent the interest of consumers in the proceedings before the Commission. The list of individuals, who participated in the TVS, is provided at **Appendix-1**. During the TVS, the Commission directed MSETCL to provide additional information and clarifications on the issues raised during the TVS. The Commission also directed MSETCL to submit the draft Public Notice in English and Marathi in the format prescribed by the Commission.

1.10 ADMISSION OF PETITION AND PUBLIC PROCESS

MSETCL submitted its responses to the queries raised during the TVS along with the revised Petition on April 6, 2010, and the Commission admitted the APR Petition of MSETCL on April 8, 2010.

In accordance with Section 64 of the EA 2003, the Commission directed MSETCL to publish its application in the prescribed abridged form and manner, to ensure adequate public participation. The Commission also directed MSETCL to reply expeditiously to all the suggestions and comments received from stakeholders on its Petition. MSETCL issued the

Public Notice in newspapers inviting comments/suggestions from stakeholders on its APR Petition. The Public Notice was published in The Times of India, Indian Express, Loksatta, Lokmat and Dainik Sakaal newspapers on April 12, 2010. The copies of MSETCL's Petitions and its summary were made available for inspection/purchase to members of the public at MSETCL's offices and on MSETCL's website (www.mahatransco.in). The copy of Public Notice and Executive Summary of the Petition was also available on the website of the Commission (www.mercindia.org.in) in downloadable format. The Public Notice specified that the suggestions/objections, either in English or Marathi, may be filed in the form of affidavit along with proof of service on MSETCL.

The Commission received written objections regarding transmission losses. The list of objectors, who participated in the Public Hearing, is provided in **Appendix- 2**.

The Commission held Public Hearings at Amravati, Nagpur, Aurangabad, Nashik, Pune, and Navi Mumbai during the period from May 14 to May 22, 2010, as per the following schedule:

Sl. No.	Place /Venue of Public Hearing	Date of Hearing
1	**Amravati** Hall No.1,Divisional Commissioner's Office Camp, Amravati, District – Amravati	Friday, May 14, 2010
2	**Nagpur** Vanamati Hall, V.I.P. Road, Dharampeth, Nagpur, District-Nagpur	Saturday, May 15, 2010
3	**Nashik** Niyojan Bhavan, Collector Office Campus, Nasik Road, Nasik	Monday, May 17, 2010
4	**Pune** Council Hall, Office of the Divisional Commissioner, Pune, District-Pune – 411 011	Wednesday, May 19, 2010
5	**Aurangabad** Meeting Hall, Office of the Divisional Commissioner, Aurangabad, 431 001	Friday, May 21, 2010
6	**Navi Mumbai,** Conference Hall, 7th Floor, CIDCO Bhavan, CBD, Belapur, Navi Mumbai - 400 614	Saturday, May 22, 2010

The Commission has ensured that the due process contemplated under the law to ensure transparency and public participation was followed at every stage meticulously and adequate opportunity was given to all the persons concerned to file their say in the matter.

This Order deals with the truing up for FY 2008-09, Annual Performance Review of FY 2009-10 and determination of revenue requirement of MSETCL for FY 2010-11. Various objections that were raised on MSETCL's Petition after issuing the Public Notice, both in writing as well as during the Public Hearing, along with MSETCL's response and the Commission's rulings have been detailed in Section 2 of this Order.

1.11 ORGANISATION OF THE ORDER

This Order is organised in the following four Sections:

- **Section 1** of the Order provides a brief history of the quasi-judicial regulatory process undertaken by the Commission. For the sake of convenience, a list of abbreviations with their expanded forms has been included.
- **Section 2** of the Order lists out the various objections raised by the objectors in writing as well as during the Public Hearing before the Commission. The various objections have been summarized, followed by the response of MSETCL and the rulings of the Commission on each of the issues.
- **Section 3** of the Order details the truing up of expenses and revenue for MSETCL for FY 2008-09, including sharing of efficiency gains/losses due to controllable factors.
- **Section 4** of the Order comprises the Review of Performance for FY 2009-10, covering both physical performance and expenditure heads. This Section also comprises the Commission's analysis on various components of revenue requirement of MSETCL for FY 2010-11.

2 OBJECTIONS RECEIVED, MSETCL'S RESPONSE AND COMMISSION'S RULING

2.1 Inadequate Time for Filing Suggestions and Objections

M/s Vidarbha Industries Association and others submitted that the Petitioner has failed to comply with the requirement of timely submission of its filings. The analysis of Petition and its implications on the consumers requires substantial amount of time and effort and adequate time has not been provided to the public for filing their comments.

MSETCL's Response

MSETCL submitted its Petition for Annual Performance Review for the year FY 2009-10, Truing-up for FY 2008-09 and Annual Revenue Requirement for FY 2010-11 on 31/01/2010 and after Technical Validation Session (TVS) on 03/03/2010, the modified petition was admitted by the Commission on 08/04/2010.

Commission's Ruling

The Commission observes that the regulatory process followed in the present matter has been elaborated under Chapter-1, which is in accordance with the Conduct of Business Regulations notified by the Commission.

2.2 Metering

Ispat Industries Limited submitted that the Commission in its MYT Order dated April 2, 2007 directed MSETCL to complete the installation of interface meters by September 2007, extracts from the Order:

> *"The Commission is concerned about the slippages in the metering schedule as reported till date, and directs MSETCL to take all the necessary steps to ensure that the entire interface metering, including the interface points for the Mumbai licensees, is completed not later than September 2007."*

Further, Ispat Industries Limited added that MSETCL till the submission of Petition has not completed the installation of 100% ABT metering. However, MSETCL while replying to the Commission's queries informed about the status of metering and submitted that out of total 2213 interface locations, 2116 locations have been metered and the balance locations will be metered by February, 2010. Thus, Ispat Industries Limited requested the Commission to carry out independent audits on the current status of metering.

MSETCL's Response

In its response, MSETCL has submitted updated status of ABT meter installations and action plan for accomplishment of pending interface metering points.

Commission's Ruling

The Commission agrees with the Petitioner's observation that there has been inordinate delay in accomplishment of interface metering. The status of completion of ABT metering and Commission's views in the matter have been elaborated under Para 4.1.2 of this Order.

2.3 Transmission Losses

Bharatiya Udhami Avam Upbhokta Sangh, Sadbhavana Sangh and Maharashtra Chamber of Commerce, Industry and Agriculture objected to the transmission loss level of 4.85% of MSETCL, which is at a higher side and which has not shown improvement for the last five years.

Shri Pratap Hogade of Janta Dal submitted that a trajectory for reduction of Transmission loss needs to be laid out with strict timelines and such losses need to be maintained within the level of 4.00%

Ispat Industries Limited submitted that the Commission in its APR Order dated June 28, 2006 as in Case No. 49 of 2005 approved a normative transmission loss of 4.85% till the completion of ABT metering at all interface points. Ispat Industries Limited added that once the metering is completed, the Commission may take a review of the transmission loss trajectory over the Control Period based on actual data whereas, the Commission in its Order dated May 28, 2009 as in Case No. 114 of 2008, continued with the same level of transmission losses of 4.85% for FY 2009-10. Ispat Industries Limited added that the transmission losses are significantly high in Maharashtra as compared to States like Andhra Pradesh, Gujarat, Madhya Pradesh and Karnataka. Therefore, Ispat Industries Limited requested that Commission to revise the transmission loss targets set for measuring the performance of a transmission utility.

MSETCL's Response

In its response, MSETCL has submitted the year-wise Transmission Losses for MSETCL system as under:

YEAR	2006-07	2007-08	2008-09	2009-10	2010-11

					(Projected)
LOSSES (%)	5.94	4.67	4.88	4.59	4.52

Hence as observed from the above trend, the Transmission Losses of MSETCL are below normative level except for F.Y 2006-07, the reason for the deviation is due to use of old electromagnetic meters for energy accounting and manual readings / errors due to time of recording being manual and for F.Y 2008-09 the transmission losses are slightly marginal high due to congestion in the transmission network & delay of new upcoming transmission lines on times due to RoW problems.

MSETCL further submitted that the balance interface meters (189 Nos) are expected to be completed at the earliest. After commissioning of ABT meters the Commission may decide regarding revised allowable normative losses. MSETCL further submitted that comments on comparison with other States can be submitted upon completion of metering of interface location points. However, such comparison is unjustified as system condition, position of input power points (Generator, Interstate Input) & location of load centres would be different. MSETCL further submitted that increase in transmission loss during second half of FY 2009-10 has been projected taking into consideration increase in agricultural load consumption during Rabi season. Further, MSETCL is always striving to reduce the transmission losses.

Commission's Ruling

The Commission observes that realistic measurement of transmission loss and specifying trajectory thereof would be appropriate upon availability of metered data across all interface points over intra-State transmission network. The Commission observes that there has been inordinate delay in accomplishment of interface metering. The status of completion of ABT metering, energy accounting and transmission loss trajectory and Commission's views in the matter have been elaborated under Para 4.1.2 of this Order.

2.4 System Availability

Ispat Industries Limited submitted that the availability of HVDC system as submitted by MSETCL is well below the target availability of 95% as specified under Regulation 49.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005. It added that MSETCL is failing to achieve the normative availability of HVDC system every year and thus, requested the Commission to direct MSETCL to improve the performance and to seek reasons behind the failure to attain normative availability.

MSETCL's Response

In its response, MSETCL has submitted the year-wise HVDC system availability system and also presented detailed reasoning for lower system availability such as failure of converter transformer in HVDC terminal stations at Chandrapur and Padgha, snubber capacitor problems, replacement of Earthwire of Chandrapur-Padghe HVDC link.

Commission's Ruling

The Commission treatment for shortfall in availability for HVDC system has been addressed under Para 3.1.4 and Para 4.1.1 of this Order.

2.5 Operation and Maintenance

Ispat Industries Limited submitted that MSETCL has considered the inflation rate during the period from FY07 to November 2009 for calculating the escalation rate. Ispat Industries Limited observed that inflation reached its peak during FY 2008-09 and has been in a declining trend there on. Therefore, considering FY 2008-09 for calculation will skew the rate derived to a much higher level. Therefore, Ispat Industries Limited requested the Commission to disallow the O&M expenses as projected by MSETCL and should approve O&M expenses in accordance with the Regulation.

Further, Ispat Industries Limited submitted that the Commission in its MYT framework emphasised on regulating outputs along with the inputs. It added that the O&M expenses should be linked to the output and cost drivers in terms of inflation index, consumers served, line length maintained, substations maintained, quality of supply achieved, etc. these linkages would serve as norms for the Control Period. Further, MSETCL submitted that the O&M expenses for transmission lines per Ckt.Km is Rs. 0.94 Lakh which is very high as compared with that of O& expenses of PGCIL lines which is Rs. 0.17 Lakh per Ckt.Km. Thus, Ispat Industries Limited requested the Commission to set norms for O&M expenses for transmission lines and substation bays depending upon the voltage level, as set by other States like Madhya Pradesh and Karnataka.

Shri Pratap Hogade submitted that the actual ARR for FY 2008-09 of MSETCL is Rs 2056 Crore which is a huge increase against the Commission approved ARR of Rs 1321 Crore. Further, the actual O&M expenditure as presented by MSETCL shows an increase of 111% compared to the Commission approved O&M expenses, which is unjustified. In addition, if Commission has to approve the Audited expenses in the truing up exercise, then there is no need for elaborate Regulatory Process involved in which the expenses of the same year is approved 3 times under the name of approval, provisional truing up and final truing up.

Ispat Industries Limited added that MSETCL has not segregated the O&M expenses depending upon the level of voltage. Also, MSETCL in its Petition has not explicitly stated the definition of bay of substation. Thus, Ispat Industries Limited requested the Commission to direct MSETCL to clearly define the bay of substation with its voltage level and associated O&M expenses per bay based on the type of substation, per Ckt.Km. of transmission line length with voltage-wise break-up.

MSETCL's Response

The methodology used by MSETCL to project the escalation of O&M expenses is the same as that used by the Commission also to project the increase in O&M Expenditure, using the historical value as various inflation indices (CPI,WPI etc). The pay revision was implemented in FY 2008-09, and hence the escalation methodology has been used to project the O&M expenditure for FY 2009-10 and FY 2010-11.

Further, MSETCL presented comparison of O&M norms for various transmission utilities within State and PGCIL as summarised below:

Sr. No.	Trans Company	For Substations O&M Expenses in Rs Lakhs				For Trans. Lines O&M Expenses in Rs Lakhs		
		HVDC	400kV	220kV	132kV & Below	HVDC	400kV	220kV & below
1	PGCIL	1450	52.4	36.68	26.2	0.94	0.358	0.179
2	TPCL	36.82				2.63		
3	R-INFRA	29.39				0.81		
4	MSETCL	9.71				0.94		

As seen from the above table the average Expenditure of MSETCL is very low compared to voltage wise expenses of PGCIL and other utilities. The average Substations O&M expenses for PGCIL is Rs.391.32 Lakhs & compared to other utilities the O&M expenses of MSETCL for Substation is 3 to 4 times lesser, the transmission lines O&M expenses of MSETCL is comparatively less considering the huge network of MSETCL. The MSETCL's O&M expenditure actual is to maintain the system stable otherwise the system may collapse.

The Commission in the MYT approach paper for Multiyear Tariff Regulations for 2010-11 to 2014-15 had opined that since the configuration, network topology, organisation structure, compensation plan, and maintenance practices, etc. are different for the State transmission system as against that applicable for the regional transmission system, the relevance of such norms in the context of State transmission system should be first studied and it may not be appropriate to consider the regional O&M norms as the basis for projecting O&M expenses for State transmission network.

Further, MSETCL submitted that the factors affecting the O&M expenses of transmission network of a state depend on various factors such as topography, age of assets, load flow etc. Hence it would not be prudent to compare O&M costs of various states with those of MSETCL. Once these norms are formed for MSETCL, then such a comparison can be commented upon.

Commission's Ruling

The rationale for approval of O&M expenses have been elaborated under Para 3.2 and Para 4.3 of this Order.

2.6 Employee Expenses

Ispat Industries Limited submitted that MSETCL has considered an escalation rate of 9.77% over the actual values of FY 2008-09 for projecting employee expenses over and above the increase due to pay revision for estimating the employee expenses for FY 2009-10. It added that this undue escalation in the employee expenses in FY 2009-10 will have an impact on the employee expenses projected for FY 2010-11. It added that MSETCL projected an increase of almost100% for FY 2008-09 over FY 2007-08 on account of pay revision of Rs. 72.08 Crore, gratuity payments of Rs. 99.43 Crore and leave encashment of Rs. 38.79 Crores. Hence, Ispat Industries Limited requested the Commission not to allow these increases in a single year to avoid tariff shock to the consumers.

As regards number of employees, Ispat Industries Limited submitted that MSETCL in its Petition has submitted that 2562 posts have been filled in FY 2009-10, and it projected another 3510 posts for FY 2010-11 with financial impact of Rs. 99.29 Crore. Thus, Ispat Industries Limited requested the Commission to direct MSETCL to take up a staffing study in order to rationalise the number of employees in the organisation and reduce the related expenses on the same.

MSETCL's Response

MSETCL submitted that the gratuity & leave encashment provisions have increased in FY 2008-09 due to consideration of revised pay scales. The increase in on account provisions made to consider the impact of revised pay scales on the completed years of service and the accumulated leave of the employees. The provisions have been made on the basis of the actuarial valuation reports to comply with AS-15.

As per directives of the Commission on 05/05/2000 for the erstwhile MSEB the MSETCL (after its formation) has carried out detailed industrial engineering study of manpower through M/s Price WaterHouse Coopers consultants and study report after deliberation & modification therein submitted to the Commission. The report has been accepted by the Commission and vide its order dated 01/01/2008 (Case No. 37 of 2007) has permitted to decide /adopt staffing norms and fill in the vacancies as per study report.

MSETCL wishes to state that the Commission had not considered the effect of pay revision on employee expenses as the exact impact was not known, although the same had been provided in the ARR petition submitted to the Commission for the year FY 2008-09.

Commission's Ruling

The rationale for approval of Employees expenses have been elaborated under Para 3.2.1 and Para 4.3.1 of this Order.

2.7 Administrative and General Expenses

Ispat Industries Limited submitted that gross A&G expense for FY 2008-09 is Rs. 84.37 Crore which is approximately 57% higher than that approved by the Commission. MSETCL submitted that the reason behind the increase in the A&G expenses being increase in conveyance and travel expenses, fuel prices and higher expenses on consultants and other technical advisory. Ispat Industries Limited submitted that the hike in fuel prices have already been factored in the calculation of inflation for arriving at the estimates of A&G expenses.

As regards higher expenses on consultants and technical advisory, the Commission in its Order dated May 28, 2009 directed MSETCL that for all consultancy assignments more than Rs. 1 Crore, MSETCL should invite bids for the same and further, it should undertake a cost-benefit analysis after completion of the assignment and should list down the deliverable submitted by the Consultant. MSETCL has not provided any information regarding compliance of any of these directives given by the Commission.

MSETCL's Response

During the year 2008-09, the prices of fuel rose to unprecedented levels which was a significant factor in the rise in A&G expenses, beyond that what would have been accounted for by taking into account the rise in inflation. Further, MSETCL has not awarded any consultancy assignment worth more than Rs 1 cr during the year FY 2008-09. Other reasons for the hike in A&G expenses are lower capitalization on account of change in accounting policies, the formation of three new circles, Increase in Security related costs such as construction of fences and boundary walls and hiring of additional security guards due to enhanced threat to assets and change in taxes in many circles.

Commission's Ruling

The rationale for approval of A&G expenses have been elaborated under Para 3.2.2 and Para 4.3.2 of this Order.

2.8 Repair & Maintenance expense

Ispat Industries Limited submitted that there is an increase of 126% in the R&M expenses as against the expenses approved by the Commission. Further, as regards MSETCL's contention regarding increase of R&M expenses due to addition of new assets, Ispat Industries Limited stated that MSETCL should submit age-wise details of the assets to give better clarity as to the proportion of old assets and new assets and the corresponding O&M expenditure. Also, the increase in R&M expenditure is much higher than the percentage rise in the assets.

As regards MSETCL's contention of increase in R&M expense due to age old assets, Ispat Industries Limited submitted that MSETCL should do cost-benefit analysis for continuing use of old assets with high R&M expenses. Ispat Industries Limited requested the Commission to direct MSETCL to give reason for continuing the use of old assets with huge R&M expenses.

As regards increase in R&M expenses due to Hot-line maintenance, Ispat Industries Limited submitted that the Commission, in its previous APR Order has ruled that Hot-line maintenance is a part of routine activity and cannot be cited as a reason for additional expenses. Therefore, Ispat Industries Limited requested the Commission to disallow the same. Ispat Industries Limited added that there has been marginal improvement in system parameters like system availability, transmission losses and frequency of interruptions for which MSETCL is already getting incentives in terms of increased revenue, incentives for the system availability above the normative levels. Further, Ispat Industries Limited requested the Commission to direct MSETCL to quantify the benefits of each R&M scheme and to allow the R&M expenses for FY 2009-10 and FY 2010-11 as approved by the Commission in its Order dated May 28, 2009.

MSETCL's Response

MSETCL wishes to state that to estimate the R&M expenses, MERC has taken the R&M expenses of MSETCL during the year 2006-07 as the base year. However, after MSEB unbundling took place in June 2005, very low R&M expenditure was undertaken till MERC order the tariff order for MSETCL in Oct 2006. As such MSETCL had only 3-4 months to carry out R&M expenditure in the year 2006-07. Consequently, the 2006-07 figures do not provide a reasonable base for future R&M expenses comparison.

Commission's Ruling

The rationale for approval of R&M expenses have been elaborated under Para 3.2.3 and Para 4.3.3 of this Order.

2.9 Capital Expenditure

Shri Pratap Hogade submitted that the capital expenditure proposed by MSETCL is stupendously high and this would result in increase in major Tariff Components such as Depreciation, ROE etc., which ultimately would result in higher tariff. Hence, he has requested the Commission that such high capital expenditure proposed by MSETCL should be approved only after detailed scrutiny of the same.

Ispat Industries Limited submitted that MSETCL has incurred an actual capital expenditure of Rs. 549.17 Crore in the first half, but has proposed an expenditure of Rs. 2451 Crore for the second half of FY 2009-10 which is almost 5 times the capex incurred during the first half. Hence, Ispat Industries Limited requested the Commission to review the Capex plan for FY 2009-10 and FY 2010-11. Further, MSETCL in its Petition submitted that despite the growing volumes of electricity handled, the loss level has been kept close to normative levels. Further, MSETCL contended to strive to maintain this level of losses in the system and hence, submitted the transmission loss projected by MSLDC for the second half of FY 2009-10 and FY 2010-11. In this regard, Ispat Industries Limited submitted that MSETCL has estimated capital expenditure of approx. Rs. 3000 Crore for FY 2009-10 and projected Rs. 6000 Crore (approx) for FY 2010-11. Ispat Industries Limited added that for MSETCL has incurred capital expenditure of Rs. 297.13 Crore and Rs. 227.07 Crore for FY 2004-05 and FY 2005-06 respectively and during FY 2006-07 the actual capital expenditure incurred till December 2006 has been approx. Rs. 196 Crore. Hence, the capitalisation projected by MSETCL is very high and thus, requested the Commission to direct MSETCL to project capital expenditures at achievable and reasonable levels.

Thane Belapur Industry Association, Decunhas Modular Concepts Private Limited and several others requested the Commission to review the impact of capital investment of Rs.

31,000 Crore as proposed by the Utilities i.e., MSPGCL, MSETCL and MSEDCL in order to reduce the burden on the consumers. Further, they opposed the tariff increase proposed by the MSETCL.

Maharashtra Vij Garahak Sanghatna, Bhiwandi Padmanagar Powerloom Weavers Association, and several others have submitted that the tariff/ARR increase proposed by MSETCL for FY 2010-11 is stupendously high and appealed to the Commission to take into consideration of the basic rights of the Consumers and thereafter decide about the tariff issue. Shri Ponrathnam compared the nature of capital investment of transmission/grid infrastructure to roads and highways and suggested that similar recovery mechanism for capital investment may be devised.

MSETCL's Response

MSETCL submitted that its capital expenditure plan is reasonable & achievable. The budget estimate for 2009-10 was set at Rs. 4550.07 Cr. which was subsequently revised to Rs. 3000.00 Cr. Expenditure incurred is Rs. 1360.00 Cr. (Provisional) for 2009-10. Reduction is mainly because of ROW problems. ROW problems noticed at the time of survey are considered and routes are decided accordingly. However, major problems are faced at the time of actual execution. Time consumed in solving ROW problem reflects delay in project completion.

Even when s/s work is completed, capitalization cannot be done due to non completion of source lines or link lines due to ROW problems. Under such circumstances though capital expenditure is incurred it does not reflect in capitalization. Every DPR scheme submitted for 'In-principle' approval for MERC is accompanied with detailed cost benefit analysis in required format of MERC. For capitalized amount of 2008-09, repot detailing the benefits of schemes is being submitted to MERC shortly.

Further, MSETCL submitted that capital expenditure plan of Rs 6300 Crore for FY 2010-11 has been proposed. However, the same may be reviewed upon accomplishment of six-monthly progress for ongoing schemes. As per recent estimates, the capital expenditure for FY 2010-11 is projected to be Rs 3300 Crore. Further, MSETCL presented list of expected benefits on account of proposed capital expenditure schemes. Further, MSETCL acknowledged that the Commission vide its letter no. MERC/CAPEX/2010-11/00076 dated April 9, 2010 has sought MSETCL to clarify objectives and benefits for capex schemes undertaken during FY 2008-09. The MSETCL submitted that it shall shortly respond to above.

MSETCL submitted that transmission lines and EHV grid cannot be compared to roads and highways because of inherent differences in very nature of working. Further, even in case of roads and highways, toll tax is collected to cover the infrastructure cost. In view of Open Access and coming generation projects, it is correct that huge expenditure will be required to be incurred for transmission infrastructure, recovery of which will have to be as approved by the Commission.

Commission's Ruling

The rationale for approval of projected capitalisation for FY 2009-10 and FY 2010-11 have been elaborated under Para 4.4 of this Order.

2.10 Depreciation

Ispat Industries Limited submitted that actual regulatory depreciation including advance against depreciation for FY 2008-09 is Rs. 403.13 Crore as against the approved values of Rs. 350.42 Crore. Further, MSETCL in its Petition has submitted that the additional loan drawal during FY 2008-09 is Rs. 725.77 Crore. Ispat Industries Limited submitted that MSETCL in its Petition should clearly mention the reason behind excess loan drawal which has resulted in an increase in loan repayment over the approved amount. Further, Ispat Industries Limited requested the Commission to conduct a detailed examination of the loan drawal by MSETCL for FY 2008-09. As regards capitalisation, Ispat Industries Limited submitted that METCL should submit the details of capitalisation of the non-DPR schemes.

MSETCL's Response

In FY 2008-09, MSETCL has made an investment to the tune of Rs 1344.90 Cr excluding the investment made for SLDC. For funding this investment MSETCL has taken a total loan amounting to Rs. 725.77 crores from REC & PFC during the year. Out of this, majority of the capex (around 94 %) has been incurred on schemes for which DPRs have already been submitted to the Commission or, being less than 10 cr in size, do not require DPR to be submitted while the remaining amount pertains to schemes which were approved during the MSEB period. Consequently, the loan repayment has also increased to Rs 403.13 crores against the approved Rs 350.432 Crore, which MSETCL has requested the Commission to approve.

The capitalization of non-DPR schemes for FY 2008-09 amounts to Rs 99.12 crores, as is given in table 2-8 of the petition on page 19.

Commission's Ruling

The rationale for approval of depreciation and advance against depreciation for FY 2008-09 has been elaborated under Para 3.3 of this Order.

2.11 Interest on Long Term Loans

Ispat Industries Limited submitted that MSETCL took an additional debt of Rs. 725.77 Crore to meet its capital expenditure in FY 2008-09. Ispat Industries Limited requested the Commission to direct MSETCL to provide justification for expenditure incurred. Ispat Industries Limited requested the Commission to disallow Rs. 67.21 Crore on interest on Long-term loans in case of lack of proof on the requirement for additional borrowing. Further, Ispat Industries Limited submitted that MSETCL has projected 200% increase in loan drawal and increase in interest charges for FY 2010-11. Thus, Ispat Industries Limited requested the Commission to direct the Utility to provide detailed Capex plan specifying the application of funds from fresh loans to assess the necessity and prudence of additional borrowings.

MSETCL's Response

MSETCL submitted that the additional debt of Rs 725.77 Crore has been taken to fund the capital expenditure amounting to Rs 1344.90 crores for the year FY 2008-09. Out of this, the capital expenditure on schemes which have been approved during the MSEB period and for which DPRs are in the process of being prepared and submitted to the Commission amount only to Rs 84.81 crores. Thus, it is evident that most of the capex (around 94 %) has been incurred on schemes for which DPRs have already been submitted to the Commission or, being less than 10 cr in size, do not require DPR to be submitted. The detailed scheme wise capital expenditure and progress has already been submitted to the Commission. Hence, the new drawal of loans amounting to Rs 725.77 crores was essential to carry out the requisite capital expenditure for the year FY 2008-09, which has resulted in net interest expenditure totaling to Rs 237.04 crores for the year, an increase of Rs 67.21 crores over the approved Rs 237.04 crores.

For the years FY 2009-10 and FY 2010-11, the capital expenditure projected to be carried out is Rs 3000 crores and Rs 6300 crores respectively. This has been done to carry out extensive modernization of the lines, further reduce losses, increase system availability and for evacuation of power from the new generation projects coming up in the state. MSETCL proposes to fund this capital expenditure by drawing new loans amounting to 80% of the expenditure and meeting the rest 20% through internal accruals. Keeping in mind the low equity base of the company and the large capital expenditure planned, it would not be possible to increase the proportion of equity in the capital expenditure, and hence the new loans to be taken in the years FY 2009-10 and FY 2010-11 have been projected at Rs 2400 crores and Rs 5040 crores respectively.

Commission's Ruling

The rationale for approval of interest expense for FY 2008-09 has been elaborated under Para 3.6 of this Order.

2.12 Standard of Performance

Ispat Industries Limited and others submitted that there should be critical review of services and quality of the supply of power by MSETCL. Further, they requested the Commission to frame Regulations for measuring the performance of transmission licensee in terms of quality of supply like harmonics, voltage fluctuations, etc. Further, the amount of capital expenditure should be linked to SOP to make the utilities accountable.

Ispat Industries Limited requested the Commission to direct MSETCL to submit monthly reports on the performance indices and put the same information on its website.

Shri Ponrathnam submitted that transmission licensee should manage the reactive power requirement of the transmission grid so that voltage profile is maintained.

MSETCL's Response

MSETCL submitted that the draft for Standard of Performance for Transmission Licensee is submitted to Commission and is in the process for approval.

MSETCL submitted that for secure and reliable operation of the grid it is essential that reactive demand shall be met at the load point which would result in reduction in losses and maintaining correct voltage profile. Efforts are made by MSETCL to maintain the correct voltage profile with the help of reactive power compensation, high voltage direct current (HVDC) lines and generators.

Commission's Ruling

The Commission notes the suggestion made by Objector to devise standard of performance for the transmission licensee and to establish linkage of capital expenditure to such standard of performance. However, the same will have to be undertaken as part of separate regulatory process for developing appropriate SOP regulations as per Section 57 of the Act and cannot be undertaken as part of present APR exercise.

2.13 Connectivity to Nuclear Power Stations

Sadbhavana Sangh submitted that no more transmission connectivity should be granted to Nuclear Power Plants in the State since such power plants generate hazardous waste and hence the same should not be encouraged.

Commission's Ruling

The issue of transmission connectivity to generating stations cannot be addressed as part of current regulatory process of APR approval of MSETCL.

2.14 Effect of migration of Accounts

Ispat Industries Limited submitted that MSETCL has shown an increase of Rs. 98.53 Crore, Rs. 101.14 Crore and Rs. 7.64 Crore in employee expenses, A&G expenses and R&M expenses respectively. Ispat Industries Limited requested the Commission to examine the effect in detail since it has lead to an increase of approx. Rs. 200 Crore.

MSETCL's Response

Under ESAAR accounting, MSETCL was capitalizing a fixed percentage (15% including HOS of 4%) of work in progress expenditure as general establishment charges in the case of O&M circles and 4% of work in progress expenditure as HOS. Since O&M circles are also carrying out capital expenditure schemes, as such part of their O&M expenses should be capitalized. Similarly, there is a HO supervision on capital expenditure schemes implemented by construction circles hence a part of HO expenses were also capitalized. However, under AS-10 Accounting of fixed assets, only purely construction circles expenditures can be capitalized. In case of O&M circles, there expenses should be charged to the revenue account. To comply with these provisions, MSETCL has withdrawn such expenses capitalized since the inception of the company (ie from FY 2005-06 to FY 2008-09) from the fixed assets and WIP account and charged the same to the revenue account. Consequently, MSETCL has also reduced the revenue requirement of FY 2008-09 by the amount equivalent to the depreciation and RoE earned on access capitalization during the period FY 2005-06 to FY 2008-09. Further, consumer contribution of Rs 19 crores has also been withdrawn from the balance sheet and included in the head 'Other Income', thereby further reducing the ARR. The details of the same have been provided in the petition.

Commission's Ruling

The regulatory treatment for change of accounting policy and migration of Accounts from ESAAR to ICAI Guidelines under Companies Act, 1956 has been elaborated under Para 3.1 and other relevant sub-sections of this Order.

2.15 Denomination of Transmission Tariff for Open Access transactions

M/s BF Utilities Ltd and Bharat Forge Ltd submitted that transmission charges for open access customers be determined and charged on the basis of Rs/MWh or Rs/kWh instead of Rs/kW. According to the objector, this would make the transmission charges for open access more relevant and reasonable as the same would be based on actual energy transmitted/wheeled.

MSETCL's Response:

MSETCL submitted that determination of transmission tariff is under purview of MERC and it would not like to provide its views in this respect.

Commission's Rulings

The Commission observes that denomination of short term open access charges in Rs/MWh or Rs/kWh instead of Rs/MW/day would be simple and easy to implement. The Commission observes that earlier condition that short term open access charges shall be payable for minimum 6 hours duration within day was rendering the short term open access transactions for duration lower than 6 hours un-economical. The Commission also notes that MSETCL as largest transmission licensee in the State has not objected to proposed suggestion of revision in denomination of transmission pricing for short term open access transactions in terms of Rs/kWh or Rs/MWh. Accordingly, the Commission accepts the suggestion made by the objector and rules that the transmission charges for short term open access transaction shall be denominated in Rs/MWh and the condition of payment of transmission charges for minimum 6 hours duration shall no longer be applicable. However, the Commission reiterates that transmission charges for long term open access transactions shall continue to be denominated in terms of Rs/kW/month. The transmission tariff for long term open access transactions and short term open access transactions as approved by the Commission for FY 2010-11 has been elaborated under Commission's Order (Case 120 of 2009) for Transmission Tariff for use of InSTS. The same shall come into effect from September 1, 2010 as specified under said Order.

3 TRUING UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2008-09

MSETCL, in its Petition for Annual Performance Review for FY 2009-10 and determination of revenue requirement for FY 2010-11, has sought final truing up of expenditure and revenue for FY 2008-09 based on actual expenditure and revenue as per audited accounts. MSETCL submitted the reasons behind variation in the actual expenses for FY 2008-09, as compared with the expenses approved after provisional truing-up for FY 2008-09 in its APR Order dated May 28, 2009 in Case No. 114 of 2008.

MSETCL submitted the computation of sharing of gains and losses on account of interest on working capital under the truing up exercise for FY 2008-09. In accordance with Regulation 19 of the MERC Tariff Regulations, the Commission has approved the sharing of efficiency gains and losses due to controllable factors for FY 2008-09 for MSETCL in this Section.

3.1 Change of Accounting Policy and Effect of Migration of Accounts from ESAAR to Companies Act

MSETCL, in its Petition, submitted that in FY 2008-09, MSETCL has migrated its accounting system from ESAAR to ICAI Guidelines under the Companies Act, 1956, and there exists significant differences between previous accounting procedures under ESAAR and revised system of accounting adopted under Companies Act 1956, including, but not limited to variation in disclosure, policy of depreciation on assets in existence at the beginning of the year, computation of interest on long term loans, valuation of inventories, principles used in computation of expenses capitalized, etc. MSETCL presented the resultant variations under various heads as shown below.

3.1.1 Fixed Asset adjustment

Treatment of capitalization of assets varies significantly between Companies Act, 1956 and ESAAR system of accounting. As a result, the shift of accounting policy to ICAI Guidelines under Companies Act, 1956, has resulted in lower capitalization of expenses amounting to Rs 107.22 Crore from the formation of the Company (FY 2005-06) till the end of FY 2007-08. This excess addition to GFA, which needs to be de-capitalised, is summarised below:

Table: GFA Reduction due to Accounting Migration ***(Rs. Crore)***

Assets	FY 2005-06	FY 2006-07	FY 2007-08

Land and Land rights	-	-	-
Buildings	0.76	-1.12	-1.12
Hydraulic Works	0	0	0.01
Other Civil Works	0.96	-0.07	1.67
Plant & Machinery	11.35	11.48	50.65
Line & cable	3.41	4.89	24.23
Vehicles	0	0	0
Furniture & Fixtures	0	0.01	0.01
Office Equipment	0	0.05	0.05
Year-wise total	**16.49**	**15.23**	**75.50**
Total reduction in GFA	**107.22**		

Based on the above, adjustments need to be made to account for the extra Return on Equity and Depreciation claimed by MSETCL on account of these assets. The treatment as submitted by MSETCL and as approved by the Commission is discussed below:

3.1.2 Depreciation

MSETCL submitted that the reduction in assets would necessitate that the amount that was charged as depreciation in FY 2005-06 to FY 2007-08 on these assets be paid back and adjusted in the true-up, as shown below:

Table: Reduction in Depreciation due to Accounting Migration (Rs. Crore)

Assets	**Depreciation rate**	**Depreciation to be adjusted**		
		FY 2005-06	**FY 2006-07**	**FY 2007-08**
Land and Land rights	0.56%	-	-	-
Buildings	1.80%	0.04	-0.04	-0.01
Hydraulic Works	2.57%	0	0	0
Other Civil Works	1.80%	0.05	0	0.01
Plant & Machinery	3.60%	1.23	0.82	0.52
Line & cable	3.60%	0.37	0.35	0.25
Vehicles	18.00%	0	0	0
Furniture & Fixtures	6.00%	0	0	0
Office Equipment	6.00%	0	0.01	0
Total		**1.69**	**1.14**	**0.77**
Total reduction in	**Rs Cr**	**3.60**		

Assets	**Depreciation rate**	**Depreciation to be adjusted**
Depreciation		

MSETCL submitted the total excess depreciation to be adjusted due to migration in accounting system is Rs 3.60 Crore, which has been accepted by the Commission.

3.1.3 Return on Equity

The reduction in assets would necessitate that the amount that was charged as ROE in FY 2005-06 to FY 2007-08 on these assets be paid back and adjusted in the true-up. The details as submitted by MSETCL are shown below.

Table: Reduction in RoE due to Accounting Migration (Rs. Crore)

Assets	**ROE to be adjusted**		
	FY 2005-06	**FY 2006-07**	**FY 2007-08**
Land and Land rights	-	-	-
Buildings	0.05	-0.05	-0.01
Hydraulic Works	0	0	0
Other Civil Works	0.07	-0	0.02
Plant & Machinery	0.79	0.48	0.61
Line & cable	0.24	0.20	0.29
Vehicles	0	-	0
Furniture & Fixtures	0	0	0
Office Equipment	0	0	0
Total	**1.15**	**0.64**	**0.91**
Total Reduction in RoE	**2.70 / (2.09#)**		

 # sum reported by MSETCL is Rs 2.09 Cr, however, actual sum amounts to Rs 2.70 Cr.

Based on the above, the total amount of ROE to be deducted from true-up amount as submitted by MSETCL is Rs 2.70 Crore, which has been accepted by the Commission.

3.1.4 Interest on Long term debt

The reduction in assets would necessitate that the interest component on corresponding loan amount that was charged in FY 2005-06 to FY 2007-08 on these assets also needs to be paid back and adjusted in the true-up. MSETCL has not considered any refund of excess interest allowed on additional loan corresponding to excess assets capitalised from FY 2005-06 to FY 2007-08. However, the Commission has computed the interest on long term debt corresponding to excess assets de-capitalised during this period, as summarised below:

Table: Reduction in Interest on Loan due to Accounting Migration (Rs. Crore)

Assets	**Interest to be adjusted**		
	FY 2005-06	**FY 2006-07**	**FY 2007-08**
Assets to be de-capitalised	16.49	15.23	75.50
Loan Amount to be reduced (est. At 80% of asset value)	13.19	12.18	60.40
Op. Balance	0.00	13.19	25.38
Loan Quantum to be reduced	13.19	12.18	60.40
Cl. Balance	13.19	25.38	85.78
Interest @ 11.50%	**0.76**	**2.22**	**6.39**
Total Reduction in Interest	**9.37**		

Based on the above, the total amount of interest to be deducted from true-up amount is Rs 9.37 Crore.

3.1.5 Expense Capitalisation

MSETCL submitted that the following adjustments would need to be made by adding/subtracting back the effect of items under/over-claimed as part of the ARR submission, to factor in the migration of accounting system. The adjustments proposed by MSETCL have been accepted by the Commission.

A. O&M expenses capitalised

MSETCL submitted that the shift in accounting system has resulted in the following amounts being changed from assets to expenses. As a result, these amounts, which were capitalized from FY 2005-06 to FY 2007-08, would need to be deducted from the assets and adjusted in the expenses in the present truing up process of FY 2008-09.

Employee expense capitalised: The shift in accounting system resulted in excess capitalisation of Rs 98.5 Crore over the previous 3 fiscal years. This amount is added back to employee expense capitalised in FY 2008-09 (Rs 93.6 Crore) to obtain the net capitalisation figure of Rs -4.92 Crore.

A&G expense capitalised: The shift in accounting system resulted in excess capitalisation of Rs 101.13 Crore over the previous 3 fiscal years. This amount is added back to A&G expense capitalised in 2008-09 (Rs 48.92 Crore) to obtain the net capitalisation figure of Rs -52.20 Crore.

R&M expense capitalised: The shift in accounting system resulted in excess capitalisation of Rs 7.64 Crore over the previous 3 fiscal years. This amount is added back to R&M expense capitalised in 2008-09 (Rs 6.12 Crore) to obtain the net capitalisation figure of Rs -1.52 Crore.

B. Interest capitalised

MSETCL submitted that the shift in accounting system has resulted in excess capitalisation of Rs 8.69 Crore over the previous 3 fiscal years. This amount is added back to the interest capitalised in FY 2008-09 (Rs 62.58 Crore) to obtain the net capitalization figure of Rs. 53.89 Crore.

3.2 Truing up of O&M Expenses for FY 2008-09

Operation and Maintenance (O&M) expenditure comprises of Employee expenses, Administrative & General (A&G) expenses, and Repair & Maintenance (R&M) expenses. MSETCL's submissions on each of these expenditure heads, and the Commission's ruling on the truing up of the O&M expenditure heads are detailed below.

3.2.1 Employee Expenses

The Commission had approved gross Employee expenses of Rs. 368.81 Crore and net Employee expenses of Rs. 318.32 Crore for FY 2008-09, after capitalisation of Employee expenses for FY 2008-09, in its APR Order dated May 28, 2009. MSETCL submitted that the audited gross Employee expenditure in FY 2008-09 was higher, at Rs. 594.54 Crore (including Fringe benefits of Rs. 1.37 Crore), however, upon considering effect of amortisation provision for leave encashment (Rs 23.27 Crore) and effect of net capitalisation including impact of migration of accounting policy (-Rs 4.92 Crore), the net Employee Expenses amounted to Rs. 622.73 Crore.

MSETCL submitted that the actual Employee expenses for FY 2008-09 have increased primarily due to wage revision, which is applicable from April 01, 2008. MSETCL added that the Commission, in its APR Order dated May 28, 2009, has not considered the effect of wage revision. Further, the increase in the basic pay and allowances due to wage revision work out to Rs. 72.08 Crore. MSETCL provided the breakup as under:

- Basic Salary and Dearness Allowance – Rs. 56.66 Crore
- Gratuity – Rs. 2.26 Crore
- Interest on PF Liabilities- Rs. 6.79 Crore
- Other allowance- Rs. 6.36 Crore

MSETCL submitted that the increase in the actual Employee expenses is due to higher provisioning for terminal benefits, specifically for Gratuity and Leave Encashment liability on actuarial basis, in accordance with Accounting Standards-15 (AS-15). MSETCL, in its Petition in Case No. 114 of 2008, had projected Rs. 25.43 Crore as provision for Gratuity as against Rs. 124.86 Crore actually provisioned for FY 2008-09. Further, MSETCL had also projected Rs. 14.67 Crore as provision for leave encashment as against Rs. 53.16 Crore actually provisioned for FY 2008-09 in accordance with the actuarial system of valuation. These two heads alone account for more than Rs. 137 Crore variation in the Employee expenses. MSETCL added that hiring of new employees during FY 2008-09 has also led to an increase in the Employee expenses. MSETCL further added that de-capitalisation due to migration of accounting system from ESAAR to ICAI Guidelines under the Companies Act, 1956, has also led to an increase in the Employee expenses during FY 2008-09, as it resulted in de-capitalization of assets for the period from FY 2005-06 to FY 2007-08, and a net negative capitalization of Rs. 4.92 Crore. MSETCL, in its submission, added that Fringe Benefit Tax (FBT) has also been considered under the Employee expenses for the purpose of truing-up.

In response to the Commission's query regarding provision for wage revision in its Audited Accounts for FY 2007-08, MSETCL submitted that it had not made any provision for the wage revision in its Audited Accounts for FY 2007-08 as the same is applicable from April 01, 2008.

Further, as regards excess capitalisation of Employee expenses to the tune of Rs. 98.5 Crore, MSETCL, in its response to the queries raised by the Commission, submitted that in accordance with AS 10, Administration & General expenses, Employee expenses and other expenses, which are not directly related to cost of fixed assets need to be excluded and hence, *ad hoc* capitalization is not permissible. Therefore, all such ad hoc capitalization done since inception of the Company needs to be withdrawn and instead, only the direct costs that can be related to the acquisition or construction of fixed assets needs to be identified. Therefore, expenses that have been capitalized to CWIP on an *ad hoc* basis need to be withdrawn from CWIP as on March 31, 2009 as well as from the Fixed Assets capitalized since inception of the Company, i.e., from June 6, 2005. MSETCL submitted the details of withdrawal of Employee Expenses capitalized:

Table: Details of withdrawal of capitalized O&M Expenses ***(Rs. Crore)***

Particulars	**FY 2005-06**	**FY 2006-07**	**FY 2007-08**	**FY 2008-09**	**Year wise Total**
Employee Expenses decapitalised	2.40	12.99	50.32	32.79	**98.50**

In reply to the queries raised after Technical Validation Session (TVS), MSETCL submitted the consultancy report on change of the Accounting Policy and management decisions on each item de-capitalised. Further, in accordance with the Commission's directions regarding submission of report duly certified by Auditor stating head-wise expenses of MSETCL for FY 2008-09, if change in Accounting Policy was not undertaken, MSETCL submitted the Revenue Account and Balance Sheet along with the schedules in the ESAAR and after giving the effect of migration.

For the purpose of final truing-up for FY 2008-09, the Commission has analysed the actual Employee expenses under various heads vis-à-vis the actual expenditure in FY 2007-08. For truing-up, the Commission has considered the expenses under various heads as submitted by MSETCL in its Audited Accounts. Thus, the Commission has considered gross Employee expenses of Rs. 594.54 Crore for FY 2008-09 as submitted by MSETCL. Further, the Commission has also considered Rs. 23.27 Crore on account of amortization of provisioning for leave encashment for FY 2006-07, in accordance with the APR Order for FY 2007-08 dated May 31, 2008 in Case No. 70 of 2007. As regards the impact of de-capitalisation of Rs. 98.53 Crore on account of change in accounting policy from ESAAR to ICAI Guidelines as per Companies Act 1956, the Commission is of the view that such quantum may not be passed on within single year and the same should be amortised over a period of 5 years in order to avoid tariff shock to the consumers. Thus, the Commission has considered Rs. 19.71 Crore (i.e., Rs 98.53 Crore/5 years) as the effect of migration of accounts during FY 2008-09.

Also, Fringe Benefit Tax (FBT) has been considered under Employee expenses under the truing up exercise. The summary of the employee expenses sought by MSETCL and approved by the Commission after truing up has been shown in the following table:

Table: Employee Expenses for FY 2008-09 ***(Rs. Crore)***

Sl	Particulars	APR Order	Audited	Allowed after Truing Up
1	Gross Employee Expenses	368.81	594.54	594.54
2	Add: Provision of Leave Encashment to be amortised over 5 year period starting from FY 2006-07	23.27	23.27	23.27
3	Effect of migration of accounts		(98.53)	(19.71)
4	Actual capitalisation during the year		93.61	93.61
5	Less: Capitalisation (3+4)	73.76	(4.92)	73.90
6	**Net Employee Expenses**	**318.32**	**622.73**	**543.91**

3.2.2 A & G Expenses

The Commission had approved gross A&G expenses of Rs. 63.44 Crore, and net A&G expenses of Rs. 53.92 Crore for FY 2008-09, in its APR Order dated May 28, 2009 in Case No. 114 of 2008. MSETCL submitted that the actual gross A&G expenses for FY 2008-09 are Rs. 84.37 Crore, which includes the lease rent payable by MSETCL to the MSEB Holding Company. Further, MSETCL added that the reasons for the increase in A&G expenses for FY 2008-09 were primarily on account of the following:

- Increase in the conveyance and the travel cost due to hike in fuel prices;
- Rent Increase;
- Three new circles coming under operation;
- Increase in security related costs to the extent of Rs. 9.48 Crore, including expenditure of Rs. 4.54 Crore on account of construction of boundary walls and fencing of sub-stations, and expenditure of Rs. 4.94 Crore on account of hiring of new security guards;
- Increase in electricity charges;
- Higher expenses for engaging consultants and other technical advisory;
- Increase in rates and taxes in many circles.

Further, MSETCL submitted that de-capitalisation has led to an increase in the A&G expenses for FY 2008-09. MSETCL added that the change in the Accounting System has resulted in de-capitalisation of Rs. 101.13 Crore for FY 2005-06 to FY 2007-08, which has been deducted from the A&G expense capitalised during FY 2008-09, i.e., Rs. 48.92 Crore, which gives the net de-capitalisation of Rs. 52.20 Crore in FY 2008-09.

Further, as regards excess capitalisation of A&G expenses to the extent of Rs. 101.13 Crore over the previous 3 fiscal years, MSETCL, in its reply to data gaps, submitted that in accordance with AS 10, Administration & General expenses, Employee expenses and other expenses, which are not directly related to cost of fixed assets, need to be excluded and hence, *ad hoc* capitalization is not permissible. Therefore, all such ad hoc capitalization done since inception of the Company needs to be withdrawn and instead, only the direct costs that can be related to the acquisition or construction of fixed assets needs to be identified. Therefore, expenses that have been capitalized to CWIP on an *ad hoc* basis need to be withdrawn from CWIP as on March 31, 2009 as well as from the Fixed Assets capitalized since inception of the Company, i.e., from June 6, 2005. MSETCL submitted the details of withdrawal of A&G Expenses capitalized:

Table: Details of withdrawal of capitalized O&M Expenses ***(Rs. Crore)***

Particulars	**FY 2005-06**	**FY 2006-07**	**FY 2007-08**	**FY 2008-09**	**Year wise Total**
A&G Expenses decapitalised	10.03	14.97	37.31	38.82	**101.13**

The Commission does not agree with the contentions of MSETCL and considers A&G expense as controllable expenditure. Hence, for purpose of truing-up, the Commission has considered A&G expense of Rs. 63.44 Crore as approved by the Commission in its APR Order dated May 28, 2009 for FY 2008-09 and has shared the difference between the actuals and A&G expenses allowed after truing up under the 'Sharing of gains and losses' section of this Order. As regards the impact of de-capitalisation of Rs. 101.13 Crore on account of change in accounting policy from ESAAR to ICAI Guidelines as per Companies Act 1956, the Commission is of the view that such quantum may not be passed on within single year and should be amortised over a period of 5 years in order to avoid tariff shock to the consumers. Thus, the Commission has considered Rs. 20.23 Crore (i.e., Rs 101.13 Crore/5 years) as effect of migration of accounts. Further, the Commission notes that MSETCL has submitted actual capitalization of A&G expense during FY 2008-09 of Rs 48.92 Crore against Gross A&G expense of Rs 84.34 Crore, which amounts to over 56% of Gross A&G expenses which is very high. The Commission has considered capitalization of A&G expenses at 15% in line with past trend. The summary of A&G expenses sought by MSETCL and approved by the Commission after truing up has been shown in the following table:

Table: A&G Expenses for FY 2008-09 **(Rs. Crore)**

Sl	Particulars	APR Order	Audited	Allowed after Truing Up
1	Gross A&G Expenses	63.44	84.34	63.44
2	Actual Capitalisation during the year		48.92	9.52
3	Effect of migration of accounts		(101.13)	(20.23)
4	Less: Capitalisation (2+3)	9.52	(52.20)	(10.71)
5	**Net A&G Expenses**	**53.92**	**136.54**	**74.15**

3.2.3 <u>R&M Expenses</u>

The Commission had approved net R&M expenses of Rs. 173.93 Crore for FY 2008-09, in its APR Order dated May 28, 2009 in Case No. 114 of 2008. MSETCL submitted that the actual net R&M expenditure for FY 2008-09 is Rs. 392.77 Crore, and the increase in R&M expenses is primarily on the account of the following:

- **Rise in the asset base and increase in R&M expenditure thereof:** MSETCL submitted that there has been a increase in the asset base, such as an increase of 7.46% in MVA transformation capacity, 1.19% in ckt.-km., 3.41% in the number of sub-stations, and 3.08% in the number of bays in FY 2008-09 as compared to previous year.

- **Old overloaded assets and catering to ever growing demand of the State:** MSETCL submitted that nearly 36% of its substations are more than 25 years old, as compared to designed life span of 25 years. Further, the system availability needs to be systematically improved in order to cater to the ever-growing demand of the State of Maharashtra. Hence, to maintain such age-old overloaded transmission network up to the requirements of intra-State grid standards, the R&M expenditure incurred shows an increasing trend.
- **Hotline maintenance:** MSETCL submitted that the expenditure on hotline maintenance for 8 hours is 15 % of the total revenue loss for 8 hours of interruption on

single 400 kV line/equipment. The expenditure on hot line maintenance is just 12 % of total R&M expenditure for FY 2008-09.

MSETCL added that minimum expenditure for R&M works necessary to be carried out per year for 8308 bays, 36734 ckt.- km of EHV lines and 47 km. of 33 kV line of HVDC for FY 2008-09 works out to Rs. 359 Crore. Further, adoption of predictive maintenance practices as well as residual life assessment techniques to ensure high level of availability and to avoid loss of generation at power stations on account of unforeseen/unpredictable equipment failures contributed to the increase in the R&M expenses.

MSETCL added that capitalisation of R&M expenses during the year, computed as capitalisation for FY 2008-09 less de-capitalization for FY 2005-06 to FY 2007-08, has led to an increase in R&M expense for FY 2008-09. The de-capitalisation is due to the change in Accounting System from ESAAR to ICAI, which resulted in de-capitalisation of the assets for the period from FY 2005-06 to FY 2007-08 and therefore, the R&M expense capitalisation portion amounting to Rs. 7.64 Crore, was de-capitalised and deducted from the R&M expenses capitalised during the year. The capitalisation for FY 2008-09 amounts to Rs. 6.12 Crore, which gives the net negative figure of Rs. 1.52 Crore.

As regards excess capitalisation of R&M expenses to the tune of Rs. 7.64 Crore, respectively, over the previous 3 fiscal years, MSETCL, in its reply to data gaps submitted that in accordance with AS 10, Administration & General expenses, Employee expenses and other expenses which are not directly related to cost of fixed assets need to be excluded and hence, *ad hoc* capitalization is not permissible. Therefore, all such ad hoc capitalization done since inception of the Company needs to be withdrawn and instead, only the direct costs that can be related to the acquisition or construction of fixed assets needs to be identified. Therefore, expenses that have been capitalized to CWIP on an *ad hoc* basis need to be withdrawn from CWIP as on March 31, 2009 as well as from the Fixed Assets capitalized since inception of the Company i.e. from June 6, 2005. MSETCL submitted the details of withdrawal of R&M Expenses capitalized:

Table: Details of withdrawal of capitalized O&M Expenses ***(Rs. Crore)***

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	Year wise Total
R&M Expenses	0.37	0.18	1.46	5.63	7.64

MSETCL added that the annual transmission losses for FY 2008-09 are 4.88%. Further, the total number of interruptions has reduced to 6.1%, and the time taken for restoration of the system has also reduced to 26.5% during FY 2008-09, while the equipment failure rate has reduced by 22% as compared to the previous year. As directed by the Commission, MSETCL quantified the benefits accrued from R&M expenses under the head Plant and Machinery for FY 2008-09.

In response to the query raised during the TVS by the Commission regarding justification for steep increase in actual R&M expenses of Rs. 391.25 Crore as per Audited Accounts vis-a-vis Rs. 173.93 Crore approved by the Commission for FY 2008-09, MSETCL submitted that the increase is primarily on account of:

- Repairs & maintenance of Transformers
- Thermovision scanning;
- Building
- Line maintenance and cable works, which includes Hot Line maintenance.

The Commission observed that the increase in R&M expense to Rs. 392.77 Crore for FY 2008-09 is a huge increase over Rs. 173.93 Crore as approved in its APR Order dated May 28, 2009. The Commission observed that the major increase in R&M expense is in respect of the R&M expense towards Plant and Machinery (i.e., increase from Rs 171.79 Crore during FY2007-08 to Rs 215.42 Crore during FY 2008-09) and R&M expense towards Lines and cable networks (i.e., increase from Rs 42.82 Crore during FY2007-08 to Rs 117.56 Crore during FY 2008-09). As part of the submission made by MSETCL in quantifying the benefits of R&M expenses, MSETCL also submitted a comparison of the component wise increase in expenses for FY 2008-09 vis-a-vis the expenses incurred against the same sub-heads in FY 2007-08. The Commission has undertaken a head-wise analysis of each component of the above major R&M expenses. Further, the Commission has also compared the rise in substation assets, which is being attributed as a reason for increase in R&M expenditure and the actual increase in R&M expenditure due to R&M expense of Plant and Machinery. It is observed that the actual asset under such asset class has increased by only 3.41%, whereas the R&M expense pertaining to the sub-station asset base has increased at a much higher rate of nearly 81% as compared to that incurred during FY 2007-08 (i.e., increase from Rs 73.94 Crore to Rs 133.87 Crore), which is clearly unjustified. Similarly, significant increase of over 174% in R&M expenses for FY 2008-09 under the head ‘Line Maintenance’ over corresponding actual expenses in FY 2007-08 is observed, which again appears to be very high since the major reason for such an increase as submitted by MSETCL in the current Petition is hotline maintenance, which is in the nature of one-time expense, and was also claimed by MSETCL during truing up of FY 2007-08. It is also noted that the argument that average age of transmission assets > 25 years holds good even during FY 2007-08 and MSETCL has achieved transmission availability far in excess of normative availability even during FY 2007-08.

Hence, for the purpose of truing-up, the Commission has applied an inflation factor of 5.19% over the approved R&M expenses for FY 2007-08, for projecting R&M expenses for FY 2008-09, along with an increase of asset base at 3.41%, i.e., percentage rise in substation assets under the sub-heads that have significant impact on the R&M expenses, under the head Plant and Machinery, and Line Maintenance. The sub-heads that have a significant impact on R&M expenses are listed in the table below.

Table: Sub-head wise expenses allowed under Plant & Machinery and Line Maintenance

Sr. No.	Particulars	Actual FY 2007-08	Actual FY 2008-09	Allowed after Truing-up (FY 2008-09)
A	**PLANT & MACHINERY**			
1	Repairs of Transformers/maintenance, DGA of Transformers, filtration of Transformers /testing of T/F oil, repairs of OLTC	27.82	48.52	30.26
2	Repairs and replacement of Relays	11.23	13.62	12.22
3	Spares of Breaker, CT, TC, CC etc.	3.74	13.08	4.07
4	Thermovision Scanning	2.84	17.95	3.09
5	Tan Delta & Capacitance Measurement (Diagnostic Test)	0.78	1.25	0.85
6	Cable Jointing kit	0.91	1.70	0.99
7	Battery Charge/Discharge cycle, Battery Cells Replacement/Maintenance /Repairs of Battery Charger	3.38	3.94	3.68
8	Renovation of Earthing	15.05	16.75	16.37

Sr. No.	Particulars	Actual FY 2007-08	Actual FY 2008-09	Allowed after Truing-up (FY 2008-09)
9	T&P Provision	2.61	3.21	2.84
10	Purchase of Digital Megger Earth Tester /Tong testers/Multi meters	0.84	2.89	0.91
11	SCADA, UPS, Repeater Battery	0.42	1.31	0.46
12	Weed control	2.66	4.54	2.89
13	Oil leakage and jumper work	1.66	5.11	1.81
	Sub-total (R&M for P&M excluding others)	**73.94**	**133.87**	**80.43**
14	Other heads under Plant and Machinery	NA	81.55	81.55
	Total A (Plant & Machinery)	**171.79**	**215.42**	**161.98**
B	**LINE MAINTENANCE /CABLE WORKS**	**42.82**	**117.56**	**46.58**

For other heads under Plant and Machinery, the Commission has considered the benefits quantified by MSETCL in its Petition from R&M activities. As regards the impact of de-capitalisation of Rs. 7.64 Crore on account of change in accounting policy from ESAAR to ICAI Guidelines as per Companies Act 1956, the Commission is of the view that such quantum need not be passed on during single year and the same should be amortised over a period of 5 years in order to avoid tariff shock to the consumers. Thus, the Commission has considered Rs. 1.52 Crore (i.e. Rs 7.64 Crore/5 years) as effect of migration of accounts. Thus, the Commission has considered net R&M expenses of Rs. 257.05 Crore for FY 2008-09.

The summary of R&M expenses sought by MSETCL and approved by the Commission after truing up has been shown in the following Table:

Table: R&M Expenses for FY 2008-09 **(Rs. Crore)**

Sl	Particulars	APR Order	Audited	Allowed after Truing Up
1	Gross R&M expenses		391.25	261.65
2	Actual capitalisation during the year		6.12	6.12

3	Effect of migration of accounts		(7.64)	(1.53)
4	Less: Expenses capitalised (2+3)		(1.52)	4.59
5	**Net R&M Expenses**	**173.93**	**392.77**	**257.05**

3.3 Depreciation and Advance against Depreciation

The Commission, in its Order dated May 28, 2009, had permitted depreciation to the extent of Rs 320.74 Crore for FY 2008-09, which amounts to 3.48% of Opening level of Gross Fixed Assets (GFA) for FY 2008-09, which was stated at Rs 9209.18 Crore. The depreciation rates were considered as prescribed under MERC Tariff Regulations.

MSETCL, under its APR Petition, submitted that the actual depreciation expenditure in FY 2008-09 was Rs 338.77 Crore, at an overall depreciation rate of 3.37%, corresponding to opening GFA of Rs 9724.05 Crore. MSETCL submitted that the actual depreciation expenditure in FY 2008-09 is lower than that submitted in the previous APR submission by MSETCL on account of migration of accounting policy from ESAAR to Companies Act and the resulting de-capitalisation of assets. Consequently, in the current Petition, MSETCL has reduced its opening GFA for computation of depreciation.

Further, MSETCL claimed repayment of principal on long term loans during FY 2008-09 amounting to Rs. 403.13 Crore. Therefore, MSETCL has claimed total regulatory depreciation, including advance against depreciation (AAD), of Rs 403.13 Crore comprising of depreciation claim of Rs 338.77 Crore and AAD claim of Rs 64.36 Crore, as against depreciation and AAD of Rs 350.42 Crore approved by the Commission.

MSETCL further clarified that depreciation charged for FY 2008-09 is only upto 90% of the GFA in accordance with the MERC Tariff Regulations.

As regards Opening GFA for FY 2008-09, the Commission observed that MSETCL has submitted the Opening GFA of Rs 9724.05 Crore, which is an adjusted Opening GFA, accommodating the impact of de-capitalisation of assets due to migration of accounts as highlighted in the Petition. An amount of Rs 107.22 Crore was submitted as the net assets de-capitalised in FY 2005-06, FY 2006-07 and FY 2007-08, the impact of which has been considered in the FY 2008-09. Thus, it was observed that the Opening GFA considered by MSETCL prior to adjustment of migration effect was Rs 9831.27 Crore against the closing GFA for FY 2007-08 or Opening GFA for FY 2008-09 of Rs 9209.18 Crore as approved by the Commission in the previous APR Order. For the purpose of truing up, the Commission has considered the Opening for FY 2008-09 at the same level of closing GFA for FY 2007-08 as approved by the Commission in the previous APR Order. Further, the same was adjusted to factor in the impact of de-capitalisation due to migration of accounts. Thus, the Opening GFA considered by the Commission for FY 2008-09 for computation of depreciation was Rs 9101.96 Crore (9209.18 Cr-107.22 Cr).

As regards depreciation rates, it was observed that MSETCL has considered a depreciation rate of 3.60% for the assets classified under "Lines and Cable Networks". However, the Commission has considered a depreciation rate of 2.57% in accordance with the MERC Tariff Regulations for the same asset class, since most of the asset base under lines and cables falls under asset class of above 66 kV, which attract the depreciation rate of 2.57% as per MERC Tariff Regulations.

The approved loan repayment for FY 2008-09 is Rs 323 Crore against MSETCL's submission of Rs 403.13 Crore in line with the reduction in standalone capitalisation for the year as elaborated in the subsequent section of this Order. The Depreciation expenditure including AAD approved by the Commission for FY 2008-09 has been summarised in the following Table:

Table: Depreciation Expense for FY 2008-09 (Rs. Crore)

Particulars	APR Order	Audited	Allowed after truing up
Opening GFA	9209.18	9724.05	9101.96
Depreciation	**320.74**	**338.77**	**279.88**
Depreciation Rate	3.48%	3.37%	2.94%
Loan Repayments	350.42	403.13	323.13
AAD	29.68	64.36	43.25
Depreciation including AAD	**350.42**	**403.13**	**323.13**

3.4 Revised Capitalisation for FY 2007-08

The Commission had approved capitalisation of Rs 245.05 Crore for FY 2007-08 in the previous APR Order against the petitioned capitalisation of Rs 867.14 Crore. The approved capitalisation comprised of Rs 65.89 Crore of Non-DPR schemes as against petitioned capitalisation of Non-DPR schemes at Rs 669.93 Crore. The Commission had considered capitalisation of Rs 179.16 Crore of DPR schemes as against petitioned capitalisation of Rs 197.21 Crore for DPR schemes. The capitalisation against the DPR schemes were approved on the basis of actual capitalisation after deducting the capitalisation towards DPR schemes, which were yet to be approved by the Commission. As regards capitalisation of Non-DPR schemes, the same was restricted provisionally by the Commission to the capitalisation level approved by the Commission in its APR Order dated May 31, 2008. The relevant extract of previous APR Order, providing the rationale for provisionally restricting the capitalisation, is reproduced below:

> *"Thus, it is evident that total capital expenditure towards Non-DPR schemes as proposed by MSETCL during FY 2007-08 amounted to only Rs 272.28 Crore out of which on-going schemes amounted to only Rs 34.92 Crore. However, MSETCL in its present submission is claiming Non-DPR related capital expenditure of Rs 618.75 Crore and capitalisation of Rs 669.93 Crore on such schemes during FY 2007-08, for projects that have been approved by the erstwhile MSEB Board. It follows that if a scheme has been approved around three years ago, then the same would have been started at least two years ago, but MSETCL has not made any such submission in its earlier submissions. MSETCL appears to have started these "non"-DPR schemes in FY 2007-08, i.e., over three years after obtaining the approval of the MSEB Board. The Commission is of the view that since these schemes have been started at a time, when the Commission's Guidelines for approval of capital investment are in force, MSETCL will have to obtain the Commission's approval for the schemes."*

Subsequent to the above direction by the Commission in the Order, MSETCL clubbed together certain Non-DPR schemes to form DPR schemes, and a total of 63 DPR schemes with estimated capital expenditure of Rs 1699 Crore, were submitted for post facto in-principle approval of the Commission. The Commission, based on the prudence check carried out, granted in-principle approval for such schemes amounting to approved capital expenditure of Rs 1268.92 Crore.

Based on the Non-DPR schemes submitted by MSETCL for capitalisation in its APR Petition for FY 2008-09, and on the basis of the above granted post facto in-principle approval to various schemes, the Commission in the current APR Order has approved total capitalisation of Rs 334.72 Crore in respect of the Non-DPR schemes capitalised in FY 2007-08. This accounts for additional capitalisation of Rs 268.83 Crore to be considered over and above the capitalisation of Rs 65.9 Crore already approved by the Commission in the previous APR Order in respect of Non-DPR schemes alone. Thus, it is required for the Commission to consider the impact of additional capitalisation towards Non-DPR schemes approved for FY

2007-08 and the Commission finds it appropriate to consider the same in the current Order along with the truing up of capitalisation of FY 2008-09, ass discussed in the subsequent section of this Order. The summary of capitalisation claimed by MSETCL for FY 2007-08 in APR Petition for FY 2008-09, capitalisation approved by the Commission in APR Order, and additional capitalisation approved through the current Order are shown in the table below:

Table: Revised Capitalisation approved for FY 2007-08 by the Commission (Rs Crore)

Particulars	**DPR**	**Non-DPR**	**Total**
Capitalisation claimed by MSETCL in APR petition for FY 2008-09	197.21	669.93	867.14
Capitalisation approved in APR Order dated May 28, 2008	179.16	65.89	245.05
Revised approval of capitalisation for FY 2007-08 in APR Order for FY 2009-10	179.16	334.72	513.88
Net Additional Capitalisation approved for FY 2007-08	**-**	**268.83**	**268.83**

3.5 Capital expenditure and Capitalisation for FY 2008-09

MSETCL submitted that in FY 2008-09, it has incurred capital expenditure to the extent of Rs 1643.02 Cr, excluding the investment made by the State Load Despatch Centre (SLDC). For funding this investment, MSETCL has taken a total loan amounting to Rs. 725.77 Cr from Rural Electrification Corporation (REC) and Power Finance Corporation (PFC) during the year. MSETCL added that the capital expenditure includes capex schemes amounting to Rs 881.46 Cr approved by the Commission and Rs 207.92 Crore worth schemes, which have been submitted to the Commission for approval. MSETCL further stated that investment made in DPR schemes approved during MSEB period amounting to Rs 84.81Crore, are in the process of submission to the Commission for approval. However, the remaining capital expenditure pertains to non-DPR related projects. The capital expenditure and capitalisation as submitted by MSETCL have been summarised in the following Table.

Table: Capitalisation for FY 2008-09 (Rs. Crore)

Particulars	**FY 2008-09**	
	Capital Expenditure	**Capitalisation**
DPR schemes (approved)	881.46	380.11

DPR Schemes (submitted for approval)	207.92	126.32
Schemes sanctioned in MSEB Period costing Rs 10 Crore & above	84.81	58.33
Non DPR Schemes	170.71	99.12
Total	**1344.90**	**663.88**

During provisional approval of capitalisation for FY 2008-09 in the previous APR Order, the Commission instituted certain general principles for allowing the capitalisation against DPR or Non DPR capex schemes in any year. The relevant extract of the Order is reproduced as under.

"In view of the above, as a general rule, the Commission has decided that the total capital expenditure and ***capitalisation on non-DPR schemes in any year should not exceed 20% of that for DPR schemes during that year****. To achieve the purpose,* ***the purported non-DPR schemes should be packaged into larger schemes by combining similar or related non-DPR schemes together and converted to DPR schemes, so that the in-principle approval of the Commission can be sought in accordance with the guidelines specified by the Commission.***

Further, in the absence of documentary evidence that the stated purpose and objective of the capex schemes have been achieved, the Commission is restricting the capitalisation considered for the purposes of determination of ARR and tariff. ***Once MSETCL submits the necessary justification to prove that the scope and objective of the capex scheme has been achieved as projected in the DPR, the same may be considered in future Orders.***

MSETCL is directed to prioritise the capex schemes based on importance and the schemes may be implemented in phased manner to minimise the impact on transmission cost.

*"****For the purpose of provisional truing up for FY 2008-09, the Commission is of the view that the benefits of capex schemes need to be examined and until it is ascertained that the projected benefits actually accrue for the benefit of the stakeholder, it would not be appropriate to allow such expenses.*** *Accordingly, out of proposed capitalisation of Rs 1184.92 Crore by MSETCL during FY 2008-09*

> *comprising capitalisation of DPR schemes of Rs 320.14 Crore and capitalisation of non-DPR schemes of Rs 864.78 Crore, the Commission has considered capitalisation of DPR schemes as Rs. 320.14 Crore on the basis of schemes already approved by the Commission. For non-DPR schemes, the Commission has retained the capitalisation of Rs 171.09 Crore as considered in its APR Order for FY 2007-08." (**emphasis added**)*

In view of the general rule stipulated by the Commission, MSETCL made certain submissions in order to establish that the benefits projected in the DPR have actually been accrued against the various schemes submitted by MSETCL, for which MSETCL has claimed capitalisation in FY 2008-09. The Commission, based on prudence check carried out, has verified the benefits against various DPR schemes submitted by MSETCL. On the basis of the benefits submitted and on the basis of capitalisation of schemes approved by the Commission, the capitalisation against DPR schemes for FY 2008-09 is approved at Rs 334.02 as against Rs 380.11 Crore submitted by MSETCL.

As regards non DPR schemes, the Commission had earlier directed to club together similar or related non DPR schemes and convert them to DPR schemes and submit the same to the Commission for its approval. As discussed in the previous section, MSETCL clubbed several non DPR schemes, which also included MSEB period schemes, in line with the direction of the Commission and the same was submitted to the Commission, and post facto in-principle approval was granted to such schemes. The Commission, based on prudence check and on the basis of in-principle approval granted to such projects, has allowed a capitalisation of Rs 127.60 Crore (Rs 94.55 Crore + Rs 33.05 Crore), in respect of such schemes in FY 2008-09 as against Rs 184.65 Crore (Rs 126.32 Crore + Rs 58.33 Crore) as claimed by MSETCL.

Further, as regards Non-DPR schemes, the Commission has restricted the level of capitalisation of Non-DPR schemes to 20% of the allowed capitalisation in respect of DPR schemes in the year. Thus, on the Commission has allowed a capitalisation of Rs 92.32 Crore, in respect of non DPR schemes in FY 2008-09.

The total capitalisation submitted by MSETCL and that approved by the Commission for FY 2008-09 is given in the Table below. Further, as discussed in the previous section, the impact of revised capitalisation of FY 2007-08 has also been considered along with capitalisation of FY 2008-09 to arrive at the net Capitalisation of FY 2007-08.

Table: Capitalisation for FY 2008-09 ***(Rs. Crore)***

Particulars	Capitalisation in FY 2008-09	
	MSETCL	Commission
DPR schemes (approved)	380.11	334.02
DPR Schemes (submitted for approval)	126.32	94.55
Schemes sanctioned in MSEB Period costing Rs 10 Crore & above	58.33	33.05
Non DPR Schemes	99.12	92.32
Total for FY 2008-09	**663.88**	**553.94**
Revised approved capitalisation for FY 2007-08	**-**	**268.83**
Net Capitalisation to be considered for FY 2008-09 including impact of revised approval for FY 2007-08	**-**	**822.77**

3.6 Interest Expenses

The Commission, under its earlier Order dated May 28, 2009, had approved interest expenses of Rs 169.83 Crore, after considering the interest expenditure on debt corresponding to capitalised assets only. MSETCL submitted that actual interest expenses of MSETCL during FY 2008-09 for long term loans, net of capitalisation, amounted to Rs. 237.04 Crore, which is higher than that approved by the Commission in its Tariff Order. MSETCL, in its Petition, stated that interest capitalisation basically comprised of interest capitalisation of Rs 62.57 Crore during FY 2008-09 and Rs 8.68 Crore of de-capitalisation claimed from FY 2005-06 and FY 2006-07 on account of change in accounting policies. MSETCL further stated that it had taken an additional debt of Rs 725.77 Crore to meet its capital expenditure during FY 2008-09.

Further, MSETCL also submitted the following:

- Copies of the loan agreements with REC and PFC.
- Proof of loan repaid and interest considered for REC and PFC.

In this context, the Commission observes that MSETCL has computed interest expenses considering loan addition of Rs 725.77 Crore during FY 2008-09 as against the proposed capitalisation of Rs 663.88 Crore, which includes impact of asset retirements during the year. The Commission reiterates that the loan amount for the purpose of interest computations chargeable to revenue account, shall be admissible only corresponding to assets put to use as per Regulation 50.3 of MERC Tariff Regulations. As highlighted under earlier paragraphs, the Commission has allowed capitalisation of Rs 553.94 Crore for FY 2008-09 and additional capitalisation of Rs 268.83 Crore for FY 2007-08 in FY 2008-09. Further, based on the study of the Audited Accounts, it is evident that significant amount of capitalisation has been funded through consumer contribution and grants to the extent of Rs. 75.85 Crore and Rs 27.24 Crore, respectively. Thus, a net funding of Rs 719.69 Crore (553.94+268.83-75.24-27.24), after adjustments for funding through consumer contribution and grants, has been considered as funded by way of debt:equity of 80:20 as proposed by MSETCL. The debt component of net capitalisation for FY 2008-09 translates into a net loan addition of Rs. 575.75 Crore during FY 2008-09. In view of the above, the Commission has re-computed the interest expenses for FY 2008-09. The interest rate for Public bonds, LIC loans, and others have been considered same as proposed by MSETCL. Further, interest rate for new loans from REC and PFC has been considered at 11.50% p.a. as submitted by MSETCL. In the absence of scheme-wise capitalisation and funding details, the Commission has considered ratio of IDC to total capitalised asset value as claimed by MSETCL, which amounts to 5.62%, to determine interest capitalisation of Rs 74.19 Crore. Further, the Commission has considered a de-capitalisation of Rs 8.69 Crore of IDC, as the effect of migration of accounting policy as submitted by MSETCL. However, the impact of the same has been spread over 5 years from FY 2008-09 onwards, and thus, only Rs 1.74 Crore of capitalisation of IDC has been considered in FY 2008-09.

Accordingly, the Commission approves the net interest expense for FY 2008-09 as summarised in the following Table:

Table: Interest Expense for FY 2008-09 (Rs. Crore)

Particulars	**APR Order**	**Audited**	**Allowed after truing up**
Opening balance of loan	1694.55	2486.91	1608.78
Additions	392.98	725.77	575.75
Repayment	(350.42)	(403.13)	(323.13)
Closing balance of loan	1737.12	2809.55	1861.40
Gross Interest expenses	212.41	291.49	**190.78**
Less: SLDC apportionment	(0.95)	(0.56)	(0.56)
Less: IDC	(41.63)	(53.89)	(74.19)
Actual capitalisation during the year		*62.58*	*74.19*
Effect of migration of accounts		*(8.69)*	*(1.74)*
Net Interest expenses	169.83	237.04	**117.77**

3.6.1 Other Interest and Finance Charges

MSETCL, in its submission, stated that the Other Interest and Finance Charges for FY 2008-09 was Rs 18.54 Crore as against Rs 26.72 Crore approved by the Commission in the previous APR Order.

In response to the Commission's query regarding the reasons for reduction in the 'Interest and other finance charges' for FY 2008-09 vis-a-vis that approved by the Commission, MSETCL submitted that expenses, particularly on stamp duty, reduced on account of execution of reduced number of agreements with Financial Institutions in FY 2008-09 as compared to FY 2007-08. MSETCL also stated that expenses on Government Guarantee also reduced owing to the fact that loan repayment was made during this tenure.

The Commission has allowed the actual expenditure under this head under the truing up exercise, since the same is lower than the approved expenses. The Guarantee Fees and Other finance charges as projected by MSETCL and approved by the Commission are shown in the Table below:

Table: Other interest and finance charges for FY 2008-09 **(Rs. Crore)**

Sl	Particulars	APR Order	Actuals /Audited	Allowed after Truing Up
1	Guarantee Fees & Finance Charges	26.72	18.54	18.54

3.6.2 Interest on Working capital

The Commission had approved interest on working capital of Rs. 50.20 Crore for FY 2008-09 in accordance with the MERC Tariff Regulations. The rate of interest on working capital loans for FY 2008-09 had been considered as 12.75%. MSETCL submitted that working capital requirement for FY 2008-09 has been worked out based on the audited accounts of MSETCL and in accordance with the MERC Tariff Regulations. For computation of interest, MSETCL has considered the short-term PLR of State Bank of India as prevailing on 1st April 2008, which was 12.75%. Accordingly, MSETCL proposed interest on working capital of Rs 52.43 Crore during FY 2008-09.

The Commission has considered the normative interest on working capital for truing up purposes, in accordance with the MERC Tariff Regulations and the expenses allowed under the truing up exercise. However, the Commission has computed the sharing of gains/losses on the difference between the normative working capital interest and the actual working capital interest incurred, which in this case is zero, since this is a controllable parameter. Further, the MERC Tariff Regulations stipulate that the rate of interest on working capital shall be considered on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on the date on which the application for determination of tariff is made. As the short-term Prime Lending Rate of State Bank of India at the time when MSETCL filed the Petition for tariff determination for FY 2007-08 was 12.75%, the Commission has considered the interest rate of 12.75 % for estimating the normative interest on working capital, which works out to Rs 40.55 Crore. The interest on working capital as projected by MSETCL and approved by the Commission is shown in the Table below:

Table: Interest on working Capital for FY 2008-09 **(Rs. Crore)**

Sl	Particulars	APR Order	Actuals /Audited	Allowed after Truing Up
1	Interest on Working Capital	50.20	52.43	40.55

3.7 Contribution to Contingency Reserves

The Commission had considered contribution to contingency reserves at 0.25% of opening GFA in accordance with the MERC Tariff Regulations, in the APR Order for FY 2008-09. MSETCL has claimed the same amount under the truing up exercise.

In this regard, the MERC (Terms and Conditions of Tariff) Regulations, 2005 stipulates,

"50.7.1 Where the Transmission Licensee has made an appropriation to the Contingencies 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 towards such appropriation in the calculation of aggregate revenue requirement:

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

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

The Commission sought details of Opening Balance of contingency reserve as on April 1, 2008 from MSETCL, and MSETCL submitted the Opening Balance as Rs 87.99 Crore. The Commission has verified that the same has not exceeded 5 % of the original cost of fixed assets as stipulated in the MERC Tariff Regulations. Further, MSETCL submitted the documentary evidence showing that the above amount has been invested in the approved class of securities. The Commission has hence, considered the amount of contribution to contingency reserves at 0.25% of opening GFA during FY 2008-09 as submitted by MSETCL under truing up exercise.

The contribution to the contingency reserve as projected by MSETCL and approved by the Commission is shown in the Table below:

Table: Contribution to contingency reserve for FY 2007-08 (Rs. Crore)

Sl	Particulars	APR Order	Actuals /Audited	Allowed after Truing Up
1	Contribution to contingency reserve	23.02	23.02	22.75

3.8 Income Tax

For FY 2008-09, MSETCL submitted that the actual income tax paid is Rs. 170.94 Crore against Rs 154.47 Crore approved by the Commission in its Order dated May 28, 2009. Further, MSETCL stated that total income tax paid in FY 2008-09 was Rs 182.13 Crore, whereas it has received refund of excess Income tax of Rs 11.19 Crore for earlier period during FY 2008-09.

In response to the Commission's query regarding whether MSETCL had incurred any expenditure due to delayed payment of the Income Tax, MSETCL confirmed that no such expenditure has been incurred. Further, in response to the query, MSETCL also submitted that MSETCL had paid Income Tax of Rs 182.13 Crore for FY 2008-09 based on ESAAR, as migration of Accounts from ESAAR to Companies Act and its audit was not completed till filing of the return. After migration of Accounts, the actual Income Tax payable is Rs 130.00 Crore. MSETCL submitted that this reduction in the estimates of Income Tax is on account of migration of accounts from ESAAR to Companies Act, where asset value has been reduced by reversing H.O.'s and GEC capitalization.

Based on MSETCL's submissions, the actual Income Tax payable for FY 2008-09 as per Companies Act is lower at Rs 130 Crore. Since, the impact of migration of accounting policy pertaining to all other components is being considered in FY 2008-09, the impact on Income Tax also has been considered by the Commission in FY 2008-09, and the Income Tax as per Companies Act has been considered for truing up purposes. The benefit of tax refund of Rs 11.19 Crore against past period excess tax payment has also been considered by the Commission as submitted by MSETCL. The summary of the income tax as allowed for FY 2008-09 is shown below:

Table: Income Tax for FY 2008-09 **(Rs. Crore)**

Sl	Particulars	APR Order	Actuals /Audited	Allowed after Truing Up
1	Income Tax	154.47	170.94	118.81

3.9 OTHER EXPENSES

MSETCL, in its Petition, submitted that other expenses approved by the Commission were Rs 0.73 Crore for FY 2008-09. However, actual other expenses were Rs 3.14 Crore, with a prior period adjustment of Rs 3.87 Crore resulting in a net income of Rs 0.73 Crore. MSETCL added that the difference is due to migration in accounting policy.

The Commission has allowed the actual Other Expenses under the truing up exercise based on audited accounts.

3.10 RETURN ON EQUITY (ROE)

MSETCL submitted that it has computed return on equity (ROE) as per principles outlined under MERC Tariff Regulations. MSETCL claimed return on equity at Rs 417.30 Crore for FY 2008-09 as compared to ROE of Rs 393.97 Crore approved by the Commission in its APR Order.

MSETCL submitted that the regulatory equity at the beginning of FY 2008-09 has been computed as closing balance for previous year less excess capitalisation during FY 2005-06 to FY 2007-08 (20% of 107.21 Crore), which work out to Rs 2743.54 Crore.

For the purpose of truing up, the Commission has recomputed the opening balance of ROE of FY 2008-09 on the basis of the closing balance of ROE for FY 2007-08, as approved in the previous APR Order less excess capitalisation during FY 2005-06 to FY 2007-08 (20% of 107.21 Crore). Further, the Commission has computed the RoE for FY 2008-09 on the opening balance of equity and on 50% of equity contribution towards the assets capitalised during the year, in accordance with the MERC Tariff Regulations. Further, the Commission is of the view that MSETCL is not entitled to ROE on the amount of assets capitalised, which have been funded through consumer contribution and grants, and the licensee cannot be allowed to retain something to which it is not entitled to. Hence, the net capitalisation, adjusted for Grants and Consumer contributions has been considered by the Commission for computation of ROE for FY 2008-09.

The ROE approved here, also includes the ROE on additional capitalisation approved by the Commission for FY 2007-08 through the current Order. This has resulted in additional ROE of Rs 10.08 Crore, which is higher than that submitted by MSETCL. The summary of RoE as projected by MSETCL and approved by the Commission for FY 2008-09 is summarised in the following Table:

Table: Return on Equity for FY 2008-09 (Rs. Crore)

Particulars	FY 2008-09		
	APR Order	Actual	Allowed after truing up
Regulatory Equity at the beginning of the year	2764.98	2914.32	2743.54
Equity portion of assets capitalised during year	98.25	132.78	143.94
Regulatory Equity at the end of the year	2863.23	3047.09	2887.47
Return on Regulatory Equity at the beginning of the year	387.10	408.00	384.09
Return on 50% of Equity portion of capitalised asset value during the year	6.88	9.29	10.08
Total Return on Regulatory Equity	393.97	**417.30**	**394.17**

3.11 Revenue from Transmission Charges

The Commission, in its Order on Transmission Pricing Framework in Case No. 58 of 2005, stipulated that the ARR of transmission licensees will be pooled together to form the Total Transmission System Cost (TTSC) for Intra-State Transmission System and each transmission licensee will be entitled to recover its approved ARR from the transmission tariff collected by the State Transmission Utility (STU) from transmission system users (i.e., distribution licensees). Accordingly, for FY 2008-09, the Commission has issued the

Transmission Tariff Order in Case No. 86 of 2006 (applicable in April and May 2008) and Transmission Tariff Order in Case No. 104 of 2007 (applicable from June 2008 to March 2009), determining the transmission charges applicable from April 1, 2008 to March 31, 2009. The approved monthly recovery was Rs 128.91 Crore for April and May 2008 and Rs 155.37 Crore from June 2008 to March 2009 as per the aforesaid Transmission Tariff Orders. Accordingly, MSETCL is entitled to recover only the amount as approved by the Commission.

MSETCL, in the current Petition, submitted the true-up of revenue amounting to Rs 1820.40 Crore. Further, it was submitted that this revenue is inclusive of that earned by MSETCL towards transmission charges for wheeling central sector power to Goa during FY 2008-09, amounting to Rs. 8.9 crore. This revenue has been earned according to the principles enunciated by WRPC, which has also been endorsed by the Appellate Tribunal for Electricity in its Judgment dated December 17, 2007 (Appeal no. 150 of 2007). The Commission has considered the revenue as submitted by MSETCL for truing up purpose.

3.12 Non Tariff Income

MSETCL, in its Petition, submitted that Non-Tariff income for FY 2008-09 was Rs 92.96 Crore as against Rs 93.58 Crore approved by the Commission in the previous APR Order for FY 2008-09. As there is only a marginal difference between the approved and actual Non-Tariff income, the commission has considered the submission of MSETCL in this respect under the current truing up process. Accordingly, the Non Tariff Income considered by the Commission for FY 2008-09 is as shown in the Table below:

Table: Non Tariff Income for FY 2008-09 (Rs. Crore)

Sl.	Particulars	APR Order	Audited/ MSETCL Petition	Allowed after truing up
4	**Non-Tariff Income for truing up**	**93.58**	**92.96**	**92.96**

3.13 Past amounts to be allowed

MSETCL, in the current Petition, submitted that an amount of Rs 25.20 Crore, which was inadvertently missed out in the previous APR Order be considered in the present Petition. The Commission has considered the same in the truing up of FY 2008-09. The head wise recovery, which amounts to Rs 25.20 Crore, as submitted by MSETCL is shown below.

Table: Past amount to be allowed **(Rs. Crore)**

Sl.	Particulars	Period	Workings	Amount to be allowed
1	Under Recovery	FY 2005-06	4.58	4.58
2	True up amount	FY 2006-07	20.27	20.37
3	Net Incentive amount	FY 2006-07	10.19-9.84	0.35
	Total			**25.20**

3.14 Incentive on Transmission Availability

The normative system availability for the transmission system is stipulated in Regulation 49.1 of the MERC Tariff Regulations, as under:

"Target availability for full recovery of annual transmission charges

(a) AC system: 98 per cent

(b) HVDC bi-pole links and HVDC back-to-back stations: 95 per cent"

The actual availability of MSETCL for FY 2008-09 as submitted by MSETCL and certified by Maharashtra State Load Despatch Centre (MSLDC) is given below:

Sl.	Transmission System	Actual Availability
1	HVAC	99.29%
2	HVDC	93.55%

Thus, the actual availability of MSETCL's HVAC transmission system has been higher than the normative availability, and lower than the normative availability in case of HVDC system. MSETCL has claimed incentive for higher availability for HVAC system as well as computed pro-rata reduction for lower availability in case of HVDC system availability, as summarised below:

Table: MSETCL's claim for Incentive/Dis-incentive for transmission system availability

Transmission System	allocation of ARR (%)	Net ARR Allocation (Rs Crore)	Incentive (Rs Crore)
HVAC	85.04%	2104.15	27.70
HVDC	14.96%	370.14	(5.65)
TOTAL	**100.00%**	**2474.29**	**22.05**

In its Order in Case No. 58 of 2005, the Commission had ruled as under:

"2.8.7 Accordingly, the Commission rules that the transmission licensee shall be entitled to incentive on achieving annual availability beyond the target availability as stipulated under MERC (Terms and Conditions for Tariff) Regulations 2005, in accordance with the following formula:

Incentive = Annual Transmission Charges x [Annual availability achieved – Target Availability] / Target Availability;

Where,

Annual transmission Charges shall correspond to ARR for the particular transmission licensee within State, as the case may be.

Provided that no incentive shall be payable above the availability of 99.75% for AC system and 98.5% for HVDC system."

Further, as per Regulation 49.1 of the MERC Tariff Regulations, the recovery of annual transmission charges below the target availability shall be on pro-rata basis. Relevant extract of the said regulations is as under:

"49.1 Target availability for full recovery of annual transmission charges

(a) AC system: - 98 per cent

(b) HVDC bi-pole links and HVDC back-to-back stations: - 95 per cent

Note 1:

Recovery of annual transmission charges below the level of target availability shall be on pro rata basis. At zero availability, no transmission charges shall be payable."

In order to compute the incentive and pro-rata reduction in recovery of annual transmission charges for shortfall in target availability of HVDC system accurately, MSETCL submitted the break-up of expenses for HVAC and HVDC. The actual expenses allowed after truing up have been apportioned between HVAC and HVDC in the same ratio as proposed by MSETCL.

Accordingly, the Commission has computed incentive for higher HVAC availability and pro-rata reduction in recovery of annual transmission charges for lower HVDC availability for FY 2008-09, as summarised in the following Table:

Table: Commission's approval for Incentive/Dis-incentive for transmission system availability

Transmission System	**Allocation of ARR (%)**	**ARR Allocation (Rs Crore)**	**Incentive (Rs Crore)**
HVAC	85.04%	1624.37	21.38
HVDC	14.96%	285.74	(4.36)
TOTAL	**100.00%**	**1910.11**	**17.02**

3.15 Sharing of Gains and Losses for FY 2008-09

MSETCL categorised all the expenditure, except interest on working capital, as uncontrollable and hence, did not compute the gains and losses for other controllable heads of expenditure. As regards interest on working capital, MSETCL has treated this expense as efficiency gains in line with the Commission's treatment of interest on working capital in its APR Order for FY 2008-09 in Case No. 114 of 2008. The relevant provisions under the MERC Tariff Regulations stipulating sharing of gains/losses due to controllable factors are reproduced below:

"17.6.2 Some illustrative variations or expected variations in the performance of the applicant which may be attributed by the Commission to controllable factors include, but are not limited to, the following:

(a) Variations in capital expenditure on account of time and/ or cost overruns/efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;

(b) Variations in technical and commercial losses, including bad debts;

(c) Variations in the number or mix of consumers or quantities of electricity supplied to consumers as specified in the first and second proviso to clause (b) of Regulation 17.6.1;

(d) Variations in working capital requirements;

(e) Failure to meet the standards specified in the Standards of Performance Regulations, except where exempted in accordance with those Regulations;

(f) Variations in labour productivity;

(g) Variations in any variable other than those stipulated by the Commission under Regulation 15.6 above, except where reviewed by the Commission under the second proviso to this Regulation 17.6.

…

19.1 The approved aggregate gain to the Generating Company or Licensee on account of controllable factors shall be dealt with in the following manner:

(a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be specified in the Order of the Commission under Regulation 17.10;
(b) In case of a Licensee, one-third of the amount of such gain shall be retained in a special reserve for the purpose of absorbing the impact of any future losses on account of controllable factors under clause (b) of Regulation 19.2; and
(c) The balance amount of gain may be utilized at the discretion of the Generating Company or Licensee.

19.2 The approved aggregate loss to the Generating Company or Licensee on account of controllable factors shall be dealt with in the following manner:
(a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be specified in the Order of the Commission under Regulation 17.10; and
(b) The balance amount of loss shall be absorbed by the Generating Company or Licensee."

The Commission is of the view that all expenditure and revenue heads cannot be considered as uncontrollable, which would mean that the Licensee has no control over any of its activities, and the actuals are to be passed through to the consumers. The Commission has considered certain controllable expenses and revenue for computing the sharing of gains/losses in accordance with the provisions of MERC Tariff Regulations, as elaborated in the following paragraphs.

O&M Expenditure

As regards the O&M expenses, the actual expenditure has been higher than that considered in the APR Order, which has been considered as efficiency loss and shared in accordance with the MERC Tariff Regulations, as reproduced above. One-third of the efficiency loss has been passed on to the consumers (distribution licensees) through increase in the ARR of FY 2010-11 and the balance amount of the efficiency loss has been treated to be absorbed by the transmission licensee. The summary of sharing of efficiency gain/(losses) is shown in the table below.

Table: Sharing of Efficiency Gain/(Loss) due to variation in O&M expenses

(Rs Crore)

Sl. No.	Particulars	Previous Year (2008-09)					
		Provisional True Up APR Order	**Actual**	**Approved after truing up (Entitlement as per Regulations/ Order)**	**Gain/ (Loss)**	**Efficiency Gain Shared with TSUs**	**Net Entitlement of MSETCL**
1	Operation & Maintenance Expenses	546.18	1152.05	875.11	(198.12)		941.15
1.1	*Employee Expenses*	*318.32*	*622.73*	*543.91*			*543.91*
1.2	*Administration & General Expenses*	*53.92*	*136.54*	*74.15*	*(62.40)*	*(20.80)*	*94.95*
1.3	*Repair & Maintenance Expenses*	*173.93*	*392.77*	*257.05*	*(135.72)*	*(45.24)*	*302.29*

Interest on Working Capital

As discussed in the above paragraphs, the actual interest on working capital incurred by MSETCL during FY 2008-09 is nil and the normative interest on working capital approved by the Commission after considering other elements of expenses and revenue as approved after truing up, works out to Rs 40.55 Crore. The Commission has considered the entire normative interest on working capital as an efficiency gain and has considered sharing of 1/3rd of the same (difference between normative interest on working capital and actual interest on working capital) with the distribution licensees, 1/3rd has been passed on to the special reserve created to offset future losses due to controllable factors, if any, and 1/3rd has been allowed to be retained by the Transmission Licensee, i.e., MSETCL.

The summary of the net ARR and efficiency gains as approved by the Commission for FY 2009-10 is given in the following Table:

Table: Summary of Truing up for FY 2008-09 including sharing of efficiency gains

Sl. No.	Particulars	Previous Year (2008-09)					
		Provisional True Up APR Order	**Actual**	**Approved after truing up (Entitlement as per Regulations/ Order)**	**Gain/ (Loss)**	**Efficiency Gain Shared with TSUs**	**Net Entitlement of MSETCL**
1	Operation & Maintenance Expenses	546.18	1152.05	875.11	(198.12)		941.15
1.1	*Employee Expenses*	*318.32*	*622.73*	*543.91*			*543.91*
1.2	*Administration & General Expenses*	*53.92*	*136.54*	*74.15*	*(62.40)*	*(20.80)*	*94.95*
1.3	*Repair & Maintenance Expenses*	*173.93*	*392.77*	*257.05*	*(135.72)*	*(45.24)*	*302.29*
2	Depreciation, including advance against depreciation	350.42	403.13	323.13			323.13
3	Interest on Long-term Loan Capital	169.83	237.04	117.77			117.77
4	Interest on Working Capital and on consumer security deposits	50.20	52.43	40.55	40.55	13.52	27.03
5	Other Interest and Finance Charges	26.72	18.54	18.54			18.54
6	Other Expenses (pls give details)	0.73	(0.73)	(0.73)			(0.73)
7	Income Tax	154.47	170.94	118.81			118.81
9	Contribution to contingency reserves	23.02	23.02	22.75			22.75
A	**Total Expenditure**	**1321.57**	**2056.42**	**1515.94**			**1568.46**
B	**Return on Equity**	**393.97**	**417.30**	**394.17**			**394.17**
C	**Aggregate Revenue Requirement**	**1715.54**	**2473.72**	**1910.11**			**1962.63**
D	**Revenue**						
D1	Revenue from transmission charges	**1811.54**	**1811.50**	**1811.50**			**1811.50**
D2	Income from wheeling central sector power to Goa	8.90	8.90	8.90			8.90
D3	Other Income	93.58	92.96	92.96			92.96
	Total Income	**1914.02**	**1913.36**	**1913.36**			**1913.36**
	True-up						
E1	**Revenue Gap / (Surplus)**	**198.48**	**560.36**	**3.25**			**49.27**
E2	**Adjustment for excess Depreciation claimed (FY 2005-06 to FY 2007-08)**		**(3.60)**				**(3.60)**
E3	**Adjustment for excess RoE claimed (FY 2005-06 to FY 2007-08)**		**(2.70)**				**(2.70)**
E4	**Adjustment for excess Interest claimed (FY 2005-06 to FY 2007-08)**		**0.00**				**(9.37)**
E5	**Provisional true-up of FY 2007-08 adjusted in tariff of FY 2008-09**						**25.20**
E	**Net True-up amount of FY 2008-09 (E1+E2+E3+E4+E5)**						**58.81**
F1	Incentive on Transmission Availability of HVAC System						21.38
F2	Incentive on Transmission Availability of HVDC System						-4.36
G	**Total True-up Amount Required gap/(surplus)**						**75.83**

Thus, the annual revenue entitlement of MSETCL for FY 2008-09 works out to Rs. 1962.63 Crore, as compared to the revenue requirement of Rs. 1715.54 Crore allowed to MSETCL in the APR Order. Further, total revenue allowed after final true-up for FY 2008-09 amounts to Rs 1913.36 Crore comprising income from transmission tariff as Rs 1811.50 Crore, income from wheeling central sector power to Goa as Rs 8.90 Crore and Non-tariff income of Rs 92.96 Crore. Accordingly, revenue gap of Rs 75.83 Crore for FY 2008-09 has been considered after final true-up for FY 2008-09, which has been added to the revenue requirement of FY 2010-11.

4 PERFORMANCE REVIEW OF FY 2009-10 AND DETERMINATION OF REVENUE REQUIREMENT FOR FY 2010-11

4.1 PERFORMANCE PARAMETERS

Regulation 16.1 of the MERC Tariff Regulations stipulates,

> *"The Commission may stipulate a trajectory, which may cover one or more control periods, for certain variables having regard to the reorganization, restructuring and development of the electricity industry in the State.*
>
> *Provided that the variables for which a trajectory may be stipulated include, but are not limited to, generating station availability, station heat rate, transmission losses, distribution losses and collection efficiency."*

The Commission, in its MYT Order for MSETCL, had considered the trajectory of system availability. Regulation 49.1 of the MERC Tariff Regulations stipulates,

> *"Target availability for full recovery of annual transmission charges*
> *(a) AC system: - 98 per cent*
> *(b) HVDC bi-pole links and HVDC back-to-back stations:- 95 per cent"*

4.1.1 <u>System Availability</u>

MSETCL was directed to maintain the system availability at the levels stipulated in the MERC Tariff Regulations in order to be eligible to recover the full fixed charges, i.e., ARR, as determined by the Commission. Any reduction in system availability will lead to pro-rata reduction in recovery of the ARR. The Commission will true-up the actual availability of MSETCL's transmission system at the end of the year based on actuals, and the recovery of complete ARR will depend on the achievement of the normative availability levels.

In this context, the Commission had directed MSETCL in the previous APR Order to arrange for requisite certification from MSLDC for transmission system availability for claiming incentive component and also directed MSLDC to formulate appropriate procedure to monitor and certify the Transmission System Availability of various transmission licensees on regular basis. Accordingly, MSETCL has submitted its transmission system availability computations for FY 2008-09, duly certified by MSLDC, which has been addressed under previous Chapter. As regards, transmission system availability during FY 2009-10, MSETCL has submitted month-wise system availability for HVAC and HVDC for six monthly period from Apr-09 to Sep-09. The HVAC transmission system availability has varied from 99.36% to 99.53% during this period whereas HVDC bipole availability was > 97% from Apr-09 to Jul-09 and reduced to 79% and 69% during Aug-09 and Sep-09 respectively. MSETCL has submitted the rationale for reduction in bipole availability as replacement of valve capacitor and annual maintenance works. The incentive computation and analysis of overall system availability during FY 2009-10 shall be undertaken upon availability of information for entire year.

4.1.2 Transmission Loss

The Commission had considered the intra-State transmission loss of 4.85% for the Control Period, in accordance with the principles outlined in the Transmission Pricing Framework Order dated June 27, 2006 and Transmission Tariff Order dated September 29, 2006.

MSETCL had undertaken the project of metering all interface locations of G< >T, T< >D, G< >D and D< >D at all EHV sub-stations, all intra-State transmission licensees and distribution licenses in the State. The first phase of the ABT metering was executed by M/s. Larsen & Toubro Ltd., which covered installation of 196 meters (Total 224 meters with 20 spare and 8 extra) along with VSAT Communication Equipment and Software at Inter-State, Inter-licensee feeders at 39 Sub-stations. In the second phase of ABT metering, orders were placed with M/s Secure Meters for supply, erection and commissioning of 9090 meters. Similarly 566 meters were ordered for the interface locations of TPC, RInfra and BEST. The entire main and check meters have been installed and commissioned as per the directives of the Commission. Further, MSETCL had placed order for installation and commissioning of communication network for all EHV sub-stations and Zonal/Circle/divisional Offices of MSETCL on M/s Tulip IT Services Ltd., Mumbai. Links have been installed and commissioned at almost all the EHV sub-stations and offices.

Energy Accounting and Interface ABT Metering

As regards the status of Interface ABT metering and energy accounting, MSETCL under its Petition has submitted that, out of the total of 2213 interface location, 2116 locations have been metered, and balance locations will be metered by Feb 2010. In reply to the query raised by the Commission on the status of ABT metering at the interface locations as on last week of February, 2010 and the proposed plan and date for completion, MSETCL provided the required status as on February 28, 2010 as under:

Status of ABT Meters Installed for Interface Locations as on 28-02-2010

Sr. No.	Particulars	Phase-II					Phase-I				New interface locations added in February 2010 in MSETCL	Grand Total Ph. I+II
							Interstate & Licensee					
								Licensee				
		MSETCL	TATA	RELIANCE	BEST	TOTAL Ph II	Interstate	TATA	Mula Pravara	Total Ph. I		
1	Interface Locations	1756	201	82	78	2117	19	43	34	96	116	2329
2	Interface locations installed	1687	196	82	78	2043	19	43	34	96	-	2139
3	Interface locations commissioned	1687	196	82	78	2043	19	43	34	96	-	2139
4	Balance Interface locations	69	5	0	0	74	0	0	0	0	116	190

MSETCL further submitted that the balance new 190 Interface Locations have already been taken up and order for additional ABT Meters for the balance location is already in process and the same will be installed in 3 phases, i.e., in the Month of April, May and June 2010.

In a related development in the matter (Case No. 9 of 2010) regarding likely date for implementation of FBSM) with intra-State ABT metering, MSETCL has submitted that the first commercial billing under FBSM is expected to be issued by December 2010, as per the following schedule:

a) The balance work of installation of 157 ABT meters and 48 links will be completed by July 31, 2010.
b) The installation of ABT meters in Mumbai region is completed. The balance communication link installation is in progress and is expected to be completed by June 30, 2010.
c) The FBSM scheduling model is tested and completed, and a trial FBSM bill using MRI data and manual entry has been generated.
d) Online data is in progress, and a trial FBSM bill for August 2010 will be done by September 15, 2010, which will be circulated to all State Pool Participants for their acceptance.
e) Mock trials will be done for three months (i.e., August, September, October 2010), during which the testing of bill for calculations of energy, pool charges, SMP, Central

sector UI allocation, etc., along with validation of data will be carried out, respectively during September, October and November 2010. After completion of mock trial, bill of FBSM will be circulated for commercial consideration, i.e., by December 2010.

Transmission Loss assessment for FY 2009-10 and projection for FY 2010-11

As regards assessment of transmission loss, MSETCL under its Petition has submitted as under:

"MSETCL would like to submit that an accurate estimation of the loss levels is impossible without the full-fledged implementation of ABT metering. However, State Load Despatch Centre started computing Intra State System Transmission losses since Oct 2006 based on existing metering system. Hence, for the purposes of the Annual Performance Review, MSETCL submits the actual Transmission losses level month-wise as per the present status of metering.

Table:Transmission loss of Intra-State Trans.System

S.No	Month	2007-08		2008-09		2009-10	
		HVAC (%)	HVDC (%)	HVAC (%)	HVDC (%)	HVAC (%)	HVDC (%)
1	APR	4.47	3.9	4.93	4	4.52	3.82
2	MAY	5.1	4.05	5.69	3.71	4.56	3.62
3	JUN	4.07	4.1	4.62	3.71	4.7	3.49
4	JUL	3.15	3.88	4.48	3.63	4.57	3.44
5	AUG	3.83	3.71	3.84	3.93	3.99	3.73
6	SEP	4.31	3.62	4.27	3.48	4.46	3.63
7	OCT	4.64	3.85	5.09	3.75		
8	NOV	5.63	3.75	5.39	3.81		
9	DEC	4.99	3.88	5.01	3.78		
10	JAN	5.45	3.93	5.13	3.79		
11	FEB	4.93	3.98	4.85	3.85		
12	MAR	5.07	3.98	4.97	3.98		
	TOTAL	4.67%	3.89%	4.88%	3.78%	4.87%	3.62%

Despite the growing volume of electricity handled by the transmission network of MSEDCL, the level of losses in the system has been kept very near the normative loss level for the year as given in Commission's previous APR Order. Going forward also, MSETCL shall strive to maintain this level of losses in the system and accordingly, hereby submits the transmission loss projected by MSLDC for the second half of FY 2009-10 and FY 2010-11:

Table: Transmission loss projection of MSETCL System

H2 of FY 2009-10	FY 2010-11
4.87%	4.87%

In this context, the Commission observes that transmission loss is one of the critical performance parameters for the transmission licensee, as the transmission system users have to bear actual transmission losses. While on one hand, MSETCL has projected significant capital expenditure and capitalisation plans over the Control Period and represents that such schemes shall result in benefits such as relieving of congestion/overloaded lines, reduction in transmission loss, etc., for each scheme separately, on collective basis this does not seem to be resulting in commensurate reduction in transmission loss. The Commission has made elaborate observations on capital expenditure and capitalisation plans separately under this Order, at the same time, the Commission directs MSETCL and all transmission licensees in the State to take necessary steps to undertake realistic assessment of possible improvements in transmission loss once interface ABT metering is put in place.

As per energy accounting undertaken by MSLDC under interim balancing and settlement mechanism (IBSM), the intra-State transmission losses have ranged between 3.84% to 5.69%, with an average value of 4.88% for FY 2008-09, and have ranged between 3.99% to 4.7%, with an average value of 4.87% for FY 2009-10 (based on assessment upto September 2010). The actual transmission losses can be assessed in an improved manner, once the metering data from the ABT meters installed at all G < > T and T < > D interface points, is available during FY 2009-10 and FY 2010-11. Hence, transmission loss for InSTS for FY 2010-11 has been considered as 4.85% by the Commission.

4.2 PROVISIONAL TRUING-UP FOR FY 2009-10

MSETCL, in its APR Petition for FY 2009-10 and ARR Petition for FY 2010-11, submitted the performance for FY 2009-10 based on actual performance for the first half of the year, i.e., April to September 2009, and estimated performance for the second half of the year, i.e., October 2009 to March 2010. MSETCL submitted the comparison of each element of expenditure with that approved by the Commission in its Order dated May 28, 2009 on MSETCL's APR Petition for FY 2008-09.

The Commission will undertake the final truing up of the revenue requirement and revenue for FY 2009-10 once the audited accounts of MSETCL for FY 2009-10 are available. However, the Commission in this Order on APR for FY 2009-10 and determination of revenue requirement for FY 2010-11 has considered provisional truing up of certain elements of the revenue requirement and revenue in cases where the impact is very high, or there is a change in principles/methodology, and due to revision in capital expenditure/capitalisation figures. The revised ARR of MSETCL during FY 2009-10 as compared to the Commission's APR Order and new estimation for FY 2010-11, respectively, for MSETCL is discussed in the following paragraphs.

The Commission clarifies that the final truing up and the computation of sharing of gains and losses due to controllable factors will be undertaken, subject to prudence check, only after the audited expenses and revenue are available. Further, for computing sharing of efficiency gains/losses for FY 2009-10, the revised expenses approved for FY 2009-10 in this Order under the provisional truing up exercise will be considered as base expenses.

4.3 O&M EXPENSES FOR FY 2009-10 AND FY 2010-11

The O&M expenditure comprises of employee expenditure, A&G expenditure and R&M expenditure, as discussed below. Further, in the previous APR Orders, the Commission ruled that for FY 2009-10 and FY 2010-11, the O&M expenses allowed by the Commission for FY 2008-09 under the final truing up for FY 2008-09, after considering the base as audited expenses for FY 2006-07, will be considered as the base and increase will be allowed strictly as per the CPI/WPI growth as applicable.

4.3.1 Employee Expenses

The Commission had allowed net employee expenses of Rs. 339.89 Crore for FY 2009-10 in its APR Order dated May 28, 2009. MSETCL submitted that the employee expense for FY 2009-10 have been estimated on the basis of actual expenditure incurred till September 2009. Further, for projecting the employee expenses for the second half of FY 2009-10 and FY 2010-11, MSETCL has considered an increase of 9.77% on account of inflation using the point to point inflation over CPI numbers for Industrial Workers as per Labour Bureau, Government of India for a period of 3 years, i.e., FY 2007-08 to FY 2009-10, up to November 2009 to smoothen the inflation curve over the actual level of employee expense. Further, MSETCL submitted that the provision for leave encashment has been computed on one month of basic pay and DA thereof.

MSETCL submitted that financial impact of Rs. 12.54 Crore has been added to the employee expenses as it has created additional 2562 posts (helpers and operators) filled during December 2009 to January 2010 in FY 2009-10. For FY 2010-11, 3510 posts are projected to be filled with an estimated financial impact of Rs. 99.29 Crore. MSETCL submitted that employee expenses of Rs. 23.82 Crore for project division due to additional requirement of 939 posts for FY 2010-11 have been entirely capitalised. The remaining employee expenses have been capitalised in proportion to expenses capitalised in H1 for FY 2009-10, which is less than the previous capitalization levels, as the approach to capitalization of expenses is different under Companies Act based Accounting System. MSETCL further submitted that the increase in hiring should be seen in the context of a hiring freeze for 3 years and that most posts are necessary to meet demands of increased commissioning of sub-stations. Further, MSETCL has estimated various components of employee expense in accordance with the revised pay scale. MSETCL added that Fringe Benefit Tax (FBT) has been considered till June for FY 2009-10 and not been considered thereafter, due to change in tax laws.

In response to the Commission's query regarding submission of the details of the actual number of employees appointed till date towards filling of posts of Project Division and Other Divisions and the associated financial impact of Rs. 15.43 Crore (i.e., earlier estimates which were subsequently revised to Rs 12.54 Crore), MSETCL submitted that as against projection of 3263 new entrants, 2652 have joined as on February 26, 2010 and remaining (611) will be joining in March, 2010. On account of delay in joining, there would be a marginal reduction in projected financial impact from Rs. 15.43 Crore to Rs. 12.54 Crore and hence, the ARR needs to be modified accordingly. Further, MSETCL added that no posts have been filled in Projects Division in the current year.

For FY 2009-10, under each sub-head of employee expenditure, the Commission has considered an increase of around 6.35% on account of inflation over the revised level of Employee expenses as approved for FY 2008-09 under the truing up exercise in this Order based on the increase in Consumer Price Index (CPI) except for sub-heads of Terminal Benefits, FBT and impact due to creation of new posts. The Commission has considered the point to point inflation over CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 5 years, i.e., from the year 2005 to 2009 (numbers as on March of the year), to smoothen the inflation curve.

In the context of provision to be made for leave encashment in FY 2006-07 under employee expense, the Commission in its Order dated May 31, 2008 (Case No. 70 of 2007) stipulated that:

> *"The Commission analysed the actual employee expenses for FY 2006-07 under various heads vis-à-vis the actual expenditure in FY 2005-06. The increase of around Rs. 116 crore in the gross employee expenses is almost entirely attributable to the*

> *impact of provisioning for leave encashment liability on the basis of actuarial valuation, in accordance with AS-15 (R)… The Commission is of the view that this expenditure of Rs. 116 crore in one year is an extra-ordinary expenditure, on account of change in accounting policy, due to the change in Accounting Standards. The expense of Rs. 116 crore amounts to 30% of the total expense, on this account alone. Given this background, the Commission is of the view that such a huge impact on account of a change in accounting policy, should not be passed on to the consumers in one financial year, and should be spread over five years. Moreover, this expense is only provisioning, and is not actually incurred by the licensee. Hence, the Commission has spread this expense over five years, starting from FY 2006-07, and the expense allowed in FY 2006-07 on this account is Rs. 23.3 crore."*

Accordingly, the Commission has considered additional amount of Rs. 23.27 Crore towards provision for leave encashment and Rs. 19.71 Crore as an adjustment of deferred provision for de-capitalisation due to migration from ESAAR to ICAI Accounting Systems for FY 2009-10 and FY 2010-11 individually. The Commission will undertake the final truing up of Employee expenses for FY 2009-10 based on actual employee expenses for the entire year and prudence check.

For FY 2010-11, for each sub-head of employee expenditure, the Commission has considered an increase of around 8.49% p.a. on account of inflation over the revised level of Employee expenses as approved for FY 2009-10 under the provisional truing up exercise in this Order, based on the increase in Consumer Price Index (CPI) with the same treatment for certain sub-heads as elaborated earlier. The Commission has not considered the impact of Rs. 99.29 Crore on account of creation of 3510 posts, since only posts have been created and the posts have not been filled by employees. For FY 2010-11, the Commission has considered the point to point inflation over CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 5 years starting from FY 2005-06 to FY 2009-10 (numbers as on March of the year), to smoothen the inflation curve. Further, the capitalisation of Employee expenses has been considered at 15.15% of the gross Employee expenses for FY 2009-10 and FY 2010-11.

Accordingly, the approved employee expenses for FY 2009-10 and FY 2010-11 is summarised in the following Table:

Table: Employee Expenses for FY 2009-10 and FY 2010-11 ***(Rs. Crore)***

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by MSETCL	Approved after provisional truing up	Revised Estimate by MSETCL	Approved
Gross employee expenses	395.77	573.74	493.95	635.66	535.56
Add: Provision of Leave Encashment to be amortised over 5 year period starting from FY 2006-07	23.27	23.27	23.27	23.27	23.27
Add: Effect of creation of new posts during 2009-10	0.00	12.54	12.54	99.29	0
Add: Effect of migration of accounts from ESAAR to Companies Act	0.00	0.00	19.71	23.82	19.71
Less: Capitalisation	(79.15)	(44.22)	(80.27)	(80.55)	(84.67)
Net employee expenses	**339.89**	**565.33**	**469.20**	**701.49**	**493.86**

4.3.2 A&G Expenses

The Commission had allowed net A&G expenses of Rs. 56.69 Crore in its APR Order dated May 28, 2009. MSETCL, in its Petition, submitted that for estimating A&G expenses for FY 2009-10 and 2010-11, it has considered an increase of 7.32% over the actual A&G expenses for FY 2008-09 based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI) with 60% and 40% weights respectively. As regards projection of lease rent payable for FY 2009-10 and FY 2010-11, MSETCL has considered the actual rent of Rs. 9.53 Crore paid to MSEB Holding Company during FY 2008-09. MSETCL submitted that A&G expenses capitalised for FY 2009-10 is in proportion of expenses capitalised in H1 of FY 2009-10, which is less than the previous capitalization levels, as the approach to capitalization of expenses is different under ICAI Accounting System.

For FY 2009-10, the Commission has considered an increase of around 5.48% on account of inflation over the gross A&G expenses for FY 2008-09 as approved in this Order, based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) and CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 5 years, i.e., FY 2004-05 to FY 2008-09, to smoothen the inflation curve. The Commission has considered a weight of 60% to WPI and

40% to CPI, based on the expected relationship with the cost drivers. The Commission will undertake the final truing up of A&G expenses for FY 2009-10 based on actual A&G expenses for the entire year and prudence check. The Commission has considered capitalisation of A&G expenses at the rate of 15% of gross A&G expenses and Rs. 20.23 Crore as an adjustment of amortization provision for de-capitalisation due to migration from ESAAR to ICAI Accounting Systems for FY 2009-10 and FY 2010-11 individually.

For FY 2010-11, for each sub-head of A&G expenditure, the Commission has considered an increase of around 7.02% on account of inflation over the revised level of A&G expenses as approved for FY 2009-10 under the provisional truing up exercise in this Order, based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) and CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 5 years, starting from FY 2005-06 to FY 2009-10, to smoothen the inflation curve. Accordingly, the approved A&G expenses for FY 2009-10 and FY 2010-11 is summarised in the following Table:

Table: A&G Expenses for FY 2009-10 and FY 2010-11 ***(Rs. Crore)***

Particulars	**FY 2009-10**			**FY 2010-11**	
	MERC Order	**Revised Estimate by MSETCL**	**Approved after provisional truing up**	**Revised Estimate by MSETCL**	**Approved**
Gross A&G Expense	66.70	89.76	66.92	95.63	71.61
Add : Effect of Migration of Accounts from ESSAR to companies Act			20.23		20.23
Less: Capitalisation	(10.00)	(5.70)	(10.04)	(6.08)	(10.75)
Net A&G expenses	**56.70**	**84.05**	**77.10**	**89.55**	**81.09**

4.3.3 R&M expenses

The Commission had allowed net R&M expenses of Rs. 182.96 Crore in its APR Order dated May 28, 2009. MSETCL has projected net R&M expense as Rs. 362.49 Crore and Rs. 383.11 Crore for FY 2009-10 and FY 2010-11, respectively.

MSETCL, in its Petition, submitted that estimates for R&M expenses for FY 2009-10 are based on actuals till September, 2009 and circle wise estimates of the need for R&M expenses prepared by respective circles for the second half of FY 2009-10. MSETCL submitted that expenses for FY 2010-11 have been projected by considering an escalation rate of 5.69% on account of inflation based on increase in WPI over estimated R&M expenses for FY 2009-10.

For FY 2009-10, for each sub-head of R&M expenditure, the Commission has considered an increase of around 4.91% on account of inflation over the revised level of R&M expenses as approved for FY 2008-09 in this Order, based on the increase in Wholesale Price Index (WPI). The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) for a period of 5 years, i.e., FY 2004-05 to FY 2008-09, to smoothen the inflation curve. The Commission will undertake the final truing up of R&M expenses for FY 2009-10 based on actual R&M expenses for the entire year subject to prudence check. The capitalisation of R&M expenses for FY 2009-10 and FY 2010-11 has been considered on proportionate basis as submitted by MSETCL for FY 2009-10. Further, the Commission has considered Rs. 1.53 Crore towards amortization provision on account of de-capitalisation due to migration from ESAAR to ICAI Accounting Systems for FY 2009-10 and FY 2010-11.

For FY 2010-11, for each sub-head of employee expenditure, the Commission has considered an increase on account of inflation rate of around 6.05% p.a. over the revised level of R&M expenses as approved for FY 2009-10 under the provisional truing up exercise in this Order, based on the increase in WPI. For FY 2010-11, the Commission has considered the point to point inflation over WPI numbers for a period of 5 years, starting from FY 2005-06 to FY 2009-10, to smoothen the inflation curve.

Accordingly, the approved R&M expenses for FY 2009-10 and FY 2010-11 is summarised in the following Table:

Table: R&M Expenses for FY 2009-10 and FY 2010-11 ***(Rs. Crore)***

Particulars	**FY 2009-10**			**FY 2010-11**	
	MERC Order	**Revised Estimate by MSETCL**	**Approved after provisional truing up**	**Revised Estimate by MSETCL**	**Approved**
Net R&M expenses	**182.96**	**362.49**	**275.79**	**383.11**	**292.38**

4.3.4 O&M expenses

The total O&M expenses approved by the Commission for FY 2009-10 and FY 2010-11 is summarised in the following Table:

Table: O&M Expenses for FY 2009-10 & FY 2010-11 ***(Rs. Crore)***

Particulars	FY 2009-10			FY 2010-11	
	MERC Order	Revised Estimate by MSETCL	Approved after provisional truing up	Revised Estimate by MSETCL	Approved
Net employee expenses	339.89	565.33	469.20	701.49	493.86
Net A&G expenses	56.70	84.05	77.10	89.55	60.87
Net R&M expenses	182.96	362.49	275.79	383.11	292.38
Total O&M Expenses	**579.55**	**1011.87**	**822.09**	**1174.15**	**847.11**

4.4 CAPITAL EXPENDITURE AND CAPITALISATION

MSETCL, in its Petition, submitted scheme-wise details of capital expenditure, clubbed under different categories, viz., ancillary schemes, evacuation schemes, substation and associated line schemes, transformer addition schemes, transformer replacement schemes, etc., for FY 2009-10 and FY 2010-11. Further, MSETCL submitted zone-wise estimates of capital expenditure as shown below.

Table: Zone-wise Capital Expenditure for FY 2009-10 and FY 2010-11 (Rs. Crore)

Zone	Revised Estimates for FY 2009-10	Budget Estimates for FY 2010-11
Vashi	267	446
Pune	531	760
Karad	377	651
Nasik	327	684
Aurangabad	295	817
Amaravati	362	549
Nagpur	634	2250
Others	207	173
Total	**3000**	**6300**

The projections of MSETCL in respect of capitalisation for FY 2009-10 and FY 2010-11 are as shown below.

Table: Capitalisation for FY 2009-10 and FY 2010-11 (Rs. Crore)

Particulars	FY 2009-10	FY 2010-11
Capital Expenditure	3000.42	6300.00
Capitalisation	907.53	2836.57

Based on MSETCL's submission under Form F4.3 and F4.4, the Commission has summarised capital expenditure and capitalisation towards DPR schemes and Non-DPR schemes with capital outlay exceeding Rs 10 Crore and lower than Rs 10 Crore as under:

Table: Capitalisation for FY 2009-10 and FY 2010-11 (Rs. Crore)

Particulars	FY 2009-10	FY 2010-11
DPR Schemes	520.14	1899.64
DPR Schemes submitted for Post facto approval	167.57	181.22
Non-DPR Schemes/Others	219.82	775.75
Total Capitalisation	**907.53**	**2836.21**

In response to the Commission's query regarding the actual capitalisation in FY 2009-10, MSETCL submitted that actual capitalisation till February 2010 was Rs.285 Crore, as against projection of Rs.908 Crore for the entire FY 2009-10. However, MSETCL submitted that it expects significant capitalisation in the month of March due to maximum number of WCR (Work Completion Reports) getting completed and rigorous follow up, which will be submitted by technical group to Accounts section for capitalisation.

As regards capitalisation of DPR schemes, the Commission had stipulated in the previous APR order that the approval for capitalisation for DPR schemes of any year shall be allowed provided the schemes have achieved the scope and objective as projected in the DPR. The relevant extract of the Order is reproduced below:

> *"Further, in the absence of documentary evidence that the stated purpose and objective of the capex schemes have been achieved, the Commission is restricting the capitalisation considered for the purposes of determination of ARR and tariff.* ***Once MSETCL submits the necessary justification to prove that the scope and objective of the capex scheme has been achieved as projected in the DPR, the same may be considered in future Orders."***

Accordingly, MSETCL made certain submissions in order to establish that the projected benefits in the DPR have actually been accrued for the various schemes submitted by MSETCL against which MSETCL has claimed capitalisation in FY 2009-10. The Commission analysed the benefits submitted by the MSETCL against the schemes that have been granted in-principle approval by the Commission. Accordingly, the Commission has approved capitalisation of Rs 229.59 Crore as against a capitalisation of Rs 520.14 Crore claimed by MSETCL for FY 2009-10.

Further, as discussed in the true up section of this Order, MSETCL clubbed several non DPR schemes, which also included MSEB period schemes, in line with the direction of the Commission and the same was submitted for approval to the Commission, and post facto in-principle approval was granted to such schemes. MSETCL submitted capitalisation against such schemes to the extent of Rs 167.57 Crore in FY 2009-10 and the Commission approves the same.

As regards, capitalisation of Non DPR schemes for FY 2009-10, the Commission restricts the same to the extent of 20% of the capitalisation allowed against DPR schemes for the year on the basis of the general rule instituted by the Commission and as detailed in the truing up section of this Order.

For FY 2010-11, the Commission observes that the proposed capital expenditure of Rs 6300 Crore and capitalisation of Rs 2836.21 Crore is much higher than the actual capitalisation achieved by MSETCL in the previous years. The actual capitalisation over the previous five years shows that capitalisation proposed for FY 2010-11 is a quantum leap in capital expenditure and capitalisation by MSETCL. The Commission had already highlighted this issue in the previous APR Order and has set some general rules for approving the capitalisation for any year as discussed in the above paragraphs and previous section of this Order. In view of the above and on the basis of the past trend of actual capitalisation by MSETCL, the Commission is provisionally restricting the capitalisation against DPR schemes to one third of what MSETCL has proposed for FY 2010-11. It may also be noted that one third of capitalisation of DPR schemes amounts to Rs 633.21 Crore (i.e., 1/3rd of Rs 1899.64 Crore), which is higher than the estimated capitalisation of Rs 520.14 Crore against DPR schemes during FY 2009-10 as approved by the Commission. The Commission has also approved the capitalisation claimed in FY 2010-11 towards the post-facto schemes. As regards, Non-DPR schemes the Commission has restricted the same on the basis of rationale provided earlier in this section.

Accordingly, the Commission has considered the capitalisation for the period as shown in the Table below:

Table: Capitalisation for FY 2009-10 and FY 2010-11 (Rs. Crore)

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Estimate by MSETCL	Approved
Capitalisation	**617.58**	**907.53**	**472.80**	**2836.21**	**977.24**

4.5 DEPRECIATION

The Commission had permitted depreciation to the extent of Rs 337.86 Crore for FY 2009-10 in its APR Order for FY 2008-09, which amounts to 3.48% of Opening level of Gross Fixed Assets (GFA) of MSETCL for FY 2009-10, which was stated at Rs 9700.38 Crore for FY 2009-10 in the APR Order.

MSETCL, in its APR Petition, submitted the revised estimate for depreciation for FY 2009-10 and FY 2010-11 as Rs 361.85 Crore and Rs 393.47 Crore, respectively, at an overall depreciation rate of 3.48%, corresponding to opening GFA of Rs 10387.93 Crore and Rs 11295.38 Crore, respectively. Further MSETCL submitted that it has considered depreciation rates specified under MERC Regulations for projecting the depreciation for FY 2009-10 and FY 2010-11. The approved and estimated depreciation for the respective years are shown below.

Table: Depreciation for FY 2009-10 and FY 2010-11 (Rs. Crore)

Particulars	FY 2009-10		FY 2010-11
	APR Order	Revised Estimate by MSETCL	Estimate by MSETCL
Depreciation	337.86	361.85	393.47
Opening Gross Fixed Assets	9700.38	10387.93	11295.38
Depreciation as a % of Opening GFA	3.48%	3.48%	3.48%

The Commission has examined the depreciation and actual capitalisation claimed by MSETCL in detail as against the various capex schemes approved by the Commission. Further, MSETCL in its additional submissions confirmed that depreciation has not been claimed beyond 90% of the asset value in line with the MERC Tariff Regulations.

As regards depreciation rates, it was observed that MSETCL has considered a depreciation rate of 3.60% for the assets classified under "Lines and Cable Networks". However, the Commission has considered a depreciation rate of 2.57% for the same asset class, since, most of the asset base under lines and cables would fall under asset class of 'above 66 kV', which attracts a depreciation rate of 2.57% as per MERC Tariff Regulations.

In view of revised value of capitalisation as approved under previous paragraphs, the approved depreciation expenditure for FY 2009-10 and FY 2010-11 is summarised in the following table:

Table: Depreciation for FY 2009-10 and FY 2010-11 (Rs. Crore)

Particulars	**FY 2009-10**			**FY 2010-11**	
	MERC Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**	**Revised Estimate by MSETCL**	**Approved**
Depreciation	337.86	361.85	306.75	393.47	321.34
Opening Gross Fixed Assets	9700.38	10387.93	9924.73	11295.38	10397.53
Depreciation as a % of Opening GFA	3.48%	3.48%	3.02%	3.48%	2.95%

4.6 INTEREST EXPENSES

The Commission had permitted net interest expense (i.e., after deducting interest expenses towards SLDC apportionment and interest capitalisation - IDC) to the extent of Rs 149.34 Crore for FY 2009-10 in its APR Order. Loan addition of Rs 494.06 Crore was considered for FY 2009-10 corresponding to 80% of the capitalised asset cost.

MSETCL, in its APR Petition, submitted the revised estimate of net interest expense for FY 2009-10 and FY 2010-11 as Rs 303.52 Crore and Rs 265.21 Crore, respectively, as summarised in the following Table:

Table: Interest Expense for FY 2009-10 and FY 2010-11 ***(Rs. Crore)***

Particulars	**FY 2009-10**		**FY 2010-11**
	APR Order	**Revised Estimate by MSETCL**	**Estimate by MSETCL**
Loan & Interest			
Op. Balance	1737.12	2809.55	4555.95
Additions	494.06	2037.92	4614.68
Repayments	(365.45)	(292.52)	(406.16)
Cl. Balance	1865.73	4554.95	8763.47
Gross Interest Expense	228.67	423.39	721.71
less SLDC apportionment	(0.95)	(0.63)	(0.88)
less IDC (existing loans)	(43.18)	(76.86)	(37.36)
less IDC (new loans)	(35.19)	(42.38)	(419.15)
Net Interest Expense	**149.34**	**303.52**	**265.21**
Over all Interest Rate	12.7%	11.5%	10.9%

MSETCL projected interest expenses corresponding to existing loan comprising of loans from LIC, Public bonds, REC, PFC and other market borrowings. Further, MSETCL proposed to finance its new capital expenditure schemes with a debt:equity ratio of 80:20 with debt to be financed primarily from the Financial Institutions such as PFC and REC. MSETCL has also planned to tie up some loan quantum with JBIC, in foreign currency. Further, it has proposed that the fresh drawals from PFC and REC will have moratorium period of 2 years and 3 years, respectively, and the interest rate is estimated as 10.75% p.a. Further, loans from JBIC have been estimated at 0.75% p.a.

The Commission has considered the means of finance and other terms for existing loans and new loans as proposed by MSETCL. However, the Commission has considered the interest expense only for the loans corresponding to assets projected to be capitalised during FY 2009-10 and FY 2010-11 as against MSETCL's methodology of computing interest on entire loan drawn to fund capital expenditure during the year and later deducting interest capitalisation to arrive at net interest expense chargeable to revenue account. The interest expense for the assets prior to commissioning needs to be considered as interest during construction forming part of capitalised cost and hence, scheme-wise accounting of funding plan and interest expense thereof, is essential.

Accordingly, approved interest expense for FY 2009-10 and FY 2010-11 is summarised in the following Table:

Table: Interest Expense for FY 2009-10 and FY 2010-11 ***(Rs. Crore)***

Particulars	FY 2009-10			FY 2010-11	
	MERC Order	Revised Estimate by MSETCL	Approved after provisional truing up	Revised Estimate by MSETCL	Approved
Loan & Interest					
Op. Balance	1737.12	2809.55	1861.40	4555.95	1966.72
Additions	494.06	2037.92	397.84	4614.68	781.80
Repayments	(365.45)	(292.52)	(292.52)	(406.16)	(366.16)
Cl. Balance	1865.73	4554.95	1966.72	8763.47	2382.36
Gross Interest Expense	228.67	423.39	209.86	721.71	**237.03**
less SLDC apportionment	(0.95)	(0.63)	(0.63)	(0.88)	(0.88)
less IDC (existing loans)	(43.18)	(76.86)	(40.98)	(37.36)	(21.11)
less IDC (new loans)	(35.19)	(42.38)	(6.72)	(419.15)	(65.59)
Net Interest Expense	**149.34**	**303.52**	**163.28**	**265.21**	**151.20**

4.7 ADVANCE AGAINST DEPRECIATION

MSETCL has sought approval for advance against depreciation for FY 2009-10 and FY 2010-11 to meet the loan repayment obligations. The Commission notes that as per Regulation 48.3 of MERC (Terms and conditions of Tariff) Regulations, 2005, where the actual amount of loan repayment in any financial year exceeds the amount of depreciation allowable under Regulation 50.4.1, the transmission licensee shall be allowed an advance against depreciation for the difference between the actual amount of such repayment and the allowable depreciation for such financial year.

Accordingly, Advance against Depreciation (AAD) projected by MSETCL and approved by Commission for FY 2009-10 and FY 2010-11 is as under:

Table: Depreciation including AAD for FY 2009-10 and FY 2010-11 ***(Rs. Crore)***

Particulars	FY 2009-10			FY 2010-11	
	MERC Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Revised Estimate by MSETCL	Approved

Particulars	**FY 2009-10**			**FY 2010-11**	
	MERC Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**	**Revised Estimate by MSETCL**	**Approved**
Depreciation	337.86	361.85	306.75	393.47	321.34
Loan Repayment	(365.45)	(292.52)	(292.52)	(406.16)	(366.16)
Advance against depreciation (AAD)	**27.59**	**0.00**	**0.00**	**12.69**	**44.81**
Depreciation and AAD	**365.45**	**361.85**	**306.75**	**406.16**	**366.16**

4.8 INTEREST ON WORKING CAPITAL FOR FY 2009-10 AND FY 2010-11

For FY 2009-10 and FY 2010-11, MSETCL submitted that the Interest on Working Capital and on consumer security deposits has been worked out in accordance with Regulation 50.7 of the MERC (Terms and Conditions of Tariff) Regulations, 2005.

For FY 2009-10, MSETCL estimated the Interest on Working Capital (IWC) considering interest rate @ 11.75% as per the components considered in the MERC Tariff Regulations, with the IWC estimated at Rs. 30.84 Crore as against Rs. 53.19 Crore approved by the Commission in its APR Order dated May 28, 2009. For FY 2010-11, MSETCL estimated the interest on working capital considering interest rate as 11.75%, as Rs. 50.41 Crore.

Further, MSETCL submitted that it has taken a loan of Rs 250 Crore during FY 2009-10 for working capital requirements such as supplier payments, wage payments, etc., from Bank of Maharashtra, Oriental Bank of Commerce and Kotak Mahindra bank. It was submitted that the actual interest outgo in this respect was Rs 5.47 Crore and has been accounted for while computing the efficiency gain to be shared in FY 2009-10.

The Commission directed MSETCL to submit the details of the actual working capital interest of Rs. 5.47 Crore and necessary documentary proof of interest on actual working capital loan for FY 2009-10. In response, MSETCL submitted necessary documentary proof and stated that the working capital requirement has been assessed from time to time and drawn from the banks. MSETCL added that as the Working Capital position is improving, some of the loans availed have been repaid and the interest expense has come down accordingly.

For FY 2009-10, the Commission has estimated the working capital requirement of MSETCL after considering the provisional truing up of various expenditure heads and revenue. The MERC Tariff Regulations stipulate that the rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on the date on which the application for determination of tariff is made. As the application for determination of tariff for FY 2009-10 was made on December 10, 2008, the Commission has considered the short-term Prime Lending Rate of State Bank of India of 13.00% prevalent at that time for estimating the interest on working capital.

For FY 2010-11, the Commission has estimated the working capital requirement of MSETCL after considering the expenditure approved in this Order. The Commission has considered the interest rate as 11.75% in accordance with the short-term Prime Lending Rate of State Bank of India prevalent at the time of filing the APR Petition for FY 2010-11, viz., January 30, 2010. The revised interest on working capital for MSETCL for FY 2009-10 and FY 2010-11, is given in the following Table:

Table: Interest on Working Capital for FY 2009-10 and FY 2010-11 (Rs Crore)

Particulars	FY 2009-10			FY 2010-11	
	MERC Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Revised Estimate by MSETCL	Approved
Interest on Working Capital	53.19	30.84	36.40	50.41	39.17

4.9 OTHER INTEREST AND FINANCE CHARGES FOR FY 2009-10 AND FY 2010-11

In the APR Order for FY 2008-09, the Commission had considered guarantee fees as Rs. 24.44 Crore, while other finance charges were computed at 0.5% of long-term loan drawal considered by the Commission. In the current APR Petition, MSETCL submitted that it has considered Finance Charges at 0.5% of long-term loan drawal during the financial year, and Guarantee Charges have been assumed at FY 2008-09 actuals.

For FY 2009-10 and FY 2010-11, the Commission has considered the Guarantee Charges as per revised estimates of MSETCL, which are lower than that approved under APR Order for FY 2009-10. Finance Charges have been considered at 0.5% of the loan drawal as approved by the Commission in this Order. The approved Other Interest and Finance Charges for MSETCL for FY 2009-10 and FY 2010-11 is given in the following Table:

Table: Other Interest & Finance Charges for FY 2009-10 and FY 2010-11 (Rs Crore)

Particulars	FY 2009-10			FY 2010-11	
	MERC Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Revised Estimate by MSETCL	Approved
Guarantee Charges	24.76	17.96	17.96	17.96	17.96
Finance Charges	2.47	9.72	1.99	25.20	3.91
Total	**27.23**	**27.67**	**19.94**	**43.16**	**21.86**

4.10 OTHER EXPENSES FOR FY 2009-10 AND FY 2010-11

MSETCL submitted that it has considered Other Expenses for FY 2009-10 and FY 2010-11 at Rs. 13.76 Crore and Rs. 12.35 Crore, respectively. The expenditure under sub-heads like compensation for injuries, death and damages, sundry expense and material cost variance for the period October 2009 to March 2010 has been kept equal to actual expense in H1 of FY 2009-10. For FY 2010-11, the sub-heads have been projected at the same level as estimated for FY 2009-10.

The Commission has accepted MSETCL's projection for compensation for injuries, death and damage and sundry expense as components of Other Expenses. However, the Commission has disallowed projection of expenses on account of material cost variance and prior period adjustments under Other Expenses for FY 2009-10 and FY 2010-11 in accordance with the approach adopted in the previous APR Order. Any variation will be considered at the time of true-up based on audited accounts and subject to prudence check. The Other Expenses projected by MSETCL and as approved by the Commission is shown in the following Table:

Table: Other Expenses for FY 2009-10 and FY 2010-11 (Rs Crore)

Particulars	FY 2009-10			FY 2010-11	
	MERC Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Revised Estimate by MSETCL	Approved
Other Expenses	0.73	13.76	0.70	12.35	0.70

4.11 INCOME TAX FOR FY 2009-10 AND FY 2010-11

The Commission had approved income tax of Rs. 154.47 Crore for FY 2009-10 in its APR Order for FY 2008-09. MSETCL, in its Petition, submitted that for FY 2009-10 and FY 2010-11, the income tax is estimated at Rs. 213.19 Crore and Rs. 124.41 Crore, respectively. MSETCL further submitted that for FY 2009-10 and FY 2010-11, the Income Tax liability has been computed considering depreciation expenses as per Income Tax Act.

However, for FY 2009-10, MSETCL added that since the revenue allowed by the Commission is lower than the revenue requirement hence, the actual income tax paid is likely to be less than that projected by MSETCL. MSETCL has paid Rs. 130.54 Crore as advance tax till December 2009. However, MSETCL contended that the difference in the projected and actual tax is likely to be incurred in the next financial year due to the adjustment of revenue gap of FY 2009-10 in the ARR of FY 2010-11.

Income tax computation submitted by MSETCL is shown in the Table below:

Table: Income Tax for FY 2009-10 and FY 2010-11 (Rs Crore)

Particular	**MSETCL Submission 2009-10**	**MSETCL Submission 2010-11**
REVENUE		
Revenue from Transmission tariff	2336.48	2502.65
Other Income	82.59	84.25
Income from Goa wheeling charges	8.90	8.90
TOTAL (A)	**2,427.97**	**2,595.80**
EXPENDITURE		
Employee Costs	565.33	701.49
Administration and General Expenses	84.05	89.55
Repairs and Maintenance	362.49	383.11
Depreciation	438.59	719.61
Interest on Long-term Loan Capital	303.52	265.21
Interest on Working Capital	5.47	15.38
Other Interest and Finance Charges	27.67	43.16
Other Expenses	13.76	12.35
TOTAL EXPENDITURE EXCLUDING Income Tax	**1,800.88**	**2,229.85**
Total Expenditure (B)	1,800.88	2,229.85
Surplus / (Deficit) (A - B)	627.09	365.95
Income Tax @ 33.99%	**213.19**	**124.41**

For the purpose of provisional truing up for FY 2009-10 and approval for FY 2010-11, the Commission has computed the tax on the Return on Equity approved by the Commission for the respective years in this Order. The applicable rate of income tax for FY 2009-10 is considered at the prevailing corporate tax level of 33.33%. However, for computation of tax for FY 2010-11, the Commission has considered the tax rate of 33.22% [30% (base tax rate) + 7.5% (Surcharge) + 3% (Education Cess] as revised by the Ministry of Finance for FY 2010-11.

Accordingly, the approved income tax liability for FY 2009-10 and FY 2010-11 along with the revised estimates by MSETCL is given in the following Table. The Commission will however, true up the income tax, based on final truing up of revenue and expenditure of MSETCL for FY 2009-10 and FY 2010-11.

Table: Income Tax for FY 2009-10 & FY 2010-11 ***(Rs Crore)***

Particulars	FY 2009-10			FY 2010-11	
	MERC Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Revised Estimate by MSETCL	Approved
Income Tax	154.47	213.19	139.65	124.41	143.23

4.12 CONTRIBUTION TO CONTINGENCY RESERVES FOR FY 2009-10 AND FY 2010-11

MSETCL submitted that the contribution to contingency reserves for FY 2009-10 and FY 2010-11 has been computed at 0.25% of opening GFA in accordance with the MERC Tariff Regulations. MSETCL projected Rs. 25.97 Crore and Rs. 28.24 Crore as contribution to contingency reserves for FY 2009-10 and FY 2010-11, respectively, in accordance with Regulation 50.7 of the MERC (Terms and Conditions of Tariff) Regulation 2005, which states that:

"50.7.1 Where the Transmission Licensee has made an appropriation to the Contingencies 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 towards such appropriation in the calculation of aggregate revenue requirement:

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

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

Further, MSETCL confirmed that it has already invested the contingency reserve created in FY 2008-09 in accordance with the Regulations stipulated under MERC (Terms and Conditions of Tariff) Regulation 2005, in securities authorised under the Indian Trusts Act, 1882.

The Commission has verified that the contingency reserves of MSETCL do not exceed 5% of the original cost of fixed assets. Accordingly, the Commission has approved the contribution to contingency reserves at 0.25% of opening GFA for FY 2009-10 and FY 2010-11, respectively.

Table: Contribution to Contingency Reserve for FY 2009-10 & FY 2010-11 (Rs Crore)

Particulars	**FY 2009-10**			**FY 2010-11**	
	MERC Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**	**Revised Estimate by MSETCL**	**Approved**
Contribution to Contingency Reserve	24.25	25.97	24.81	28.24	25.99

4.13 RETURN ON EQUITY (ROE)

The Commission had permitted return on equity to the extent of Rs 409.50 Crore for FY 2009-10 in its previous APR Order at the rate of 14% in accordance with Regulation 50.1 of MERC Tariff Regulations. MSETCL, in its present APR Petition, submitted the revised estimate of return on equity for FY 2009-10 and estimates for FY 2010-11 as Rs 439.30 Crore and Rs 491.72 Crore, respectively, as shown in the Table below:

Table: RoE for FY 2009-10 and FY 2010-11 (Rs Crore)

Particulars	**FY 2009-10**	**FY 2010-11**

	APR Order	Revised Estimate by MSETCL	Revised Estimate by MSETCL
Regulated Equity at beginning of year	2863.23	3047.09	3228.60
Equity Portion of Capitalised Expenditure	123.52	181.51	567.31
Regulated Equity at the end of the year	2986.75	3228.60	3795.91
Return on Regulated Equity at beginning of year	400.85	426.59	452.00
Return on Equity Portion Of Capital Expenditure Capitalised	8.65	12.71	39.71
Total Return on Regulated Equity	**409.50**	**439.30**	**491.72**

The Commission has computed the RoE for FY 2009-10 and FY 2010-11 on the opening balance of equity as well as 50% of the equity component of the assets capitalised during the year in accordance with the MERC Tariff Regulations as applicable for the transmission business, and after considering the revised capitalisation figures as elaborated in earlier paragraphs. Further, since the data on funding of capitalisation in FY 2009-10 and FY 2010-11 through consumer contribution and grants is not known at this stage, the Commission has not reduced the equity portion on that account. The same will be considered at the time of truing up, based on audited data. Accordingly, approved Return on Equity for FY 2009-10 and FY 2010-11 is summarised in the following Table:

Table: RoE for FY 2009-10 & FY 2010-11 (Rs Crore)

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Estimate by MSETCL	Approved
Regulated Equity at beginning of year	2863.23	3047.09	2887.47	3228.60	2982.03
Equity Portion of Capitalised Expenditure	123.52	181.51	94.56	567.31	195.45
Regulated Equity at the end of the year	2986.74	3228.60	2982.03	3795.91	3177.48
Return on Regulated Equity at beginning of year	400.85	426.59	404.25	452.00	417.48
Return on Equity Portion of Capital Expenditure Capitalised	8.65	12.71	6.62	39.71	13.68

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Estimate by MSETCL	Approved
Total Return on Regulated Equity	**409.50**	**439.30**	**410.87**	**491.72**	**431.17**

4.14 NON TARIFF INCOME FOR FY 2009-10 AND FY 2010-11

MSETCL submitted that the Non-Tariff Income for FY 2009-10 is estimated at Rs 82.59 Crore as against Rs. 101.32 Crore approved by the Commission in its APR Order dated May 28, 2009. For FY 2010-11, MSETCL projected an increase of 2% in the Non-Tariff Income compared to FY 2009-10 figures, amounting to Rs. 84.25 Crore.

The Commission enquired regarding decrease of Non-Tariff Income for FY 2009-10 to Rs. 82.59 Crore as compared to Rs. 101.32 Crore as approved by the Commission in the previous APR Order. MSETCL, in its reply, submitted that for projection, it has considered 2% increase in the other income over previous year values (except Interest on Investments, Open access charges). MSETCL added that wherever the actual value of first half of FY 2009-10 were lesser than the half of previous year value, the same amount was considered for the second half. Further, MSETCL added that interest on investments was almost nil in FY 2009-10 due to non-availability of surplus funds. MSETCL submitted the following table showing break-up of Non-Tariff Income for FY 2009-10:

Table: Non tariff Income for FY 2009-10 (submitted by MSETCL)

Particulars	(Actuals/Audited) 2008-09	Apr-Sep (Actual) 2009-10	Oct-Mar (Estimated)	April - March
Interest on Other Investments	20.43	5.71	5.71	11.43
Other/Miscellaneous receipts	40.50	21.95	19.36	41.31
Interest on staff loans & Advances	0.36	0.00	0.00	0.00
Sale of Scrap	2.52	1.19	1.38	2.57
Income from Trading	0.38	0.36	0.36	0.72
Income from staff welfare activities	0.01	0.00	0.00	0.01
Revenue from ST Open	28.76	13.28	13.28	26.56

Particulars	(Actuals/Audited) 2008-09	Apr-Sep (Actual) 2009-10	Oct-Mar (Estimated)	April - March
Access Charges				
Net Non-Tariff Income	**92.96**	**42.50**	**40.10**	**82.59**

Further, in response to the Commission's query regarding justification for assuming a rise of only 2% over FY 2009-10 levels while projecting the NTI for 2010-11, MSETCL submitted that it had taken a conservative approach for projection Non-Tariff Income with the same percentage increase considered in the earlier tariff petitions and taking into account current trend, which is not expected to change considerably.

The Commission has accepted MSETCL's revised projections of Non-Tariff Income, and will undertake the truing up of Non-Tariff Income based on Audited Accounts. The Non-Tariff Income projected for MSETCL for FY 2009-10 and FY 2010-11 and approved by the Commission is given in the following Table:

Table: Non-Tariff Income for FY 2009-10 and FY 2010-11 ***(Rs. Crore)***

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	Revised Estimate by MSETCL	Approved
Non-Tariff Income	**101.32**	**82.59**	**82.59**	**84.25**	**84.25**

4.15 AGGREGATE REVENUE REQUIREMENT FOR FY 2009-10 AND FY 2010-11

Based on analysis of each component as discussed above, the Aggregate Revenue Requirement (ARR) of MSETCL for FY 2009-10 and FY 2010-11, as approved by the Commission in its APR Order, as estimated by MSETCL in the present APR Petition and as approved by the Commission in this Order is given in the following Tables:

Table: Aggregate Revenue Requirement for FY 2009-10 (Rs Crore)

S.no.	Particulars	FY 2009-10		
		APR Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**
1	Operation & Maintenance Expenses	579.54	1,011.87	822.09
1.1	Employee Expenses	339.89	565.33	469.20
1.2	Administration & General Expenses	56.69	84.05	77.10
1.3	Repair & Maintenance Expenses	182.96	362.49	275.79
2	Depreciation, including advance against depreciation	365.45	361.85	306.75
3	Interest on Long-term Loan Capital	149.34	303.52	163.28
4	Interest on Working Capital and on consumer security deposits	53.19	30.84	36.40
5	Other Interest and Finance charges	27.23	27.67	19.94
6	Other Expenses	0.73	13.76	0.70
7	Income Tax	154.47	213.19	139.65
8	Contribution to contingency reserves	24.25	25.97	24.81
10	**Total Revenue Expenditure**	**1,354.20**	**1,988.68**	**1,513.62**
11	Return on Equity Capital	409.50	439.30	410.87
12	**Aggregate Revenue Requirement**	**1,763.69**	**2,427.97**	**1,924.49**
13	Less: Non Tariff Income	101.32	82.59	82.59
14	Less: Income from Other Business	0.00	0.00	0.00
15	Less: Income from Goa Transmission Charges	8.90	8.90	8.90
16	**Aggregate Revenue Requirement from Transmission Tariff**	**1,653.48**	**2,336.48**	**1,833.00**
17	Tariff Income		-	1553.44
18	**Provisional Revenue Gap/ (Surplus) for FY 2009-10 (16-17)**		**674.53**	**279.56**
19	**Add: Revenue Gap/(Surplus)Truing up for FY 2008-09**			**75.83**
20	**Total Revenue Gap/ (Surplus) to be considered for FY 2010-11 (18+19)**			**355.38**

Based on provisional truing up of various elements for FY 2009-10 as discussed in above paragraphs, the Aggregate Revenue Requirement for FY 2009-10 works out to Rs 1833.00 Crore, as against the amount of Rs 1653.48 Crore approved in the APR Order. Further, considering actual revenue from transmission tariff during FY 2009-10 as Rs 1553.44 Crore (based on approved monthly revenue from transmission tariff of Rs 155.37 Crore for the 2 months of April and May 2009 and approved monthly revenue from transmission tariff of Rs 124.27 Crore for 10 months from June 2009 to March 2010), the net impact of provisional truing up for FY 2009-10 works out to revenue gap of Rs. 279.56 Crore. Accordingly, the Commission has considered total revenue gap of Rs 355.38 Crore during FY 2009-10, which is inclusive of the revenue gap of Rs. 75.83 Crore after final true up for FY 2008-09, while computing the Aggregate Revenue Requirement for FY 2010-11. The Commission approved ARR for FY 2010-11 is shown below in the Table

Table: Aggregate Revenue Requirement for FY 2010-11 (Rs Crore)

S.no.	Particulars	2010-11	
		Estimate by MSETCL	Approved
1	Operation & Maintenance Expenses	1,174.15	867.34
1.1	Employee Expenses	701.49	493.86
1.2	Administration & General Expenses	89.55	81.09
1.3	Repair & Maintenance Expenses	383.11	292.38
2	Depreciation, including advance against depreciation	406.16	321.34
3	Interest on Long-term Loan Capital	265.21	151.20
4	Interest on Working Capital and on consumer security deposits	50.41	39.17
5	Other Interest and Finance charges	43.16	21.86
6	Other Expenses	12.35	0.70
7	Income Tax	124.41	143.23
8	Contribution to contingency reserves	28.24	25.99
9	**Total Revenue Expenditure**	2,104.08	1,570.84
10	Return on Equity Capital	491.72	431.17
11	**Aggregate Revenue Requirement**	2,595.80	2,002.01
12	Less: Non Tariff Income	84.25	84.25
13	Less: Income from Other Business	0.00	0.00
14	Less: Income from Goa Transmission Charges	8.90	8.90
15	**Net Aggregate Revenue Requirement for FY 2010-11**	**2,502.65**	**1,908.87**
16	Add: Revenue Gap/(Surplus) for FY 2009-10 (revenue gap of FY 2008-09 included)	1258.36	355.38
17	**Net Aggregate Revenue Requirement to be recovered from Transmission Tariff**	**3,761.01**	**2,264.25**

Thus, total approved net ARR to be recovered from Transmission Tariff for FY 2010-11 works out to Rs 2264.25 Crore as against Rs 3761.01 Crore projected by MSETCL. This decrease in the approved Aggregate Revenue Requirement for FY 2009-10 and 2010-11 as against that projected by MSETCL is primarily on account of the following reasons:

- Reduction in Gross Fixed Asset, interest costs and return on equity components, consequent to reduction in approved capitalisation for FY 2009-10 and FY 2010-11
- Amortisation of impact of migration of accounts of MSETCL from ESAAR to Companies Act.
- Reduction in approved Income Tax for FY 2009-10 and FY 2010-11,
- Adjustments of revenue gaps due to final true-up of FY 2008-09 and provisional true-

up of FY 2009-10

4.16 TRANSMISSION TARIFF FOR FY 2010-11

The Commission has issued its Order in respect of the intra-State transmission pricing framework in Case No. 58 of 2005 on June 27, 2006. The ARR as approved by the Commission for MSETCL for FY 2010-11 in this Order, will be used to determine the composite ARR of the complete intra-State transmission system of all transmission licensees in the State for FY 2010-11. Hence, in this Order, the Commission has only determined the ARR for MSETCL for FY 2010-11 and not determined any transmission tariff for MSETCL. Revenue for MSETCL for FY 2010-11 will be as per the tariff to be determined by the Commission separately under its Order in the matter of intra-State transmission pricing framework in Case No. 120 of 2009.

4.17 APPLICABILITY OF ORDER

This Order, shall come into force with effect from September 1, 2010.

The Commission acknowledges the efforts taken by the Consumer Representatives and other individuals and organisations for their valuable contribution to the APR process for MSETCL for FY 2009-10 and determination of revised revenue requirement for FY 2010-11.

Sd/-	Sd/-	Sd/-
(V. L. Sonavane) Member	(S. B. Kulkarni) Member	(V. P. Raja) Chairman

(K. N. Khawarey)
Secretary, MERC

APPENDIX 1

List of Persons who attended the Technical Validation Session on March 3, 2010

S.No.	Name
MSETCL Officials	
1	Shri Arvind Singh
2	Shri Y.M. Latey
3	Shri .G. Marathe
4	Shri G.S. Limaye
5	Shri A.V. Deshpande
6	Shri P.G. Khandalkar
7	Shri K.M. Jadhav
8	Shri S.G. Kelkar
9	Shri S.J. Amberkar
10	Shri J.D. Tayade
11	Shri. N.R. Sonkaudey
12	Shri M.B. Mohire
13	Shri Amit R. Kulkarni
14	Shri A.V. Dev
15	Shri V.T. Phrike
16	Shri U.S. Bhagat
17	Smt Sapna Purohit
Others	
18	Shri Raksh Pal Abrol
19	Shri N. Ponrathnam
20	Shri O.K. Yempal
21	Shri A.M. Kawale
22	Shri B.M. Kamble
23	Shri R.J. Pawar
24	Shri V.D. Ponde
25	Shri S. Jayakanthan
26	Shri R.K. Madaw
27	Shri A.V. Gangurde
28	Shri K.J. Devgad
29	Shri L.P. Mishra

Consultants to Commission	
30	Shri Ajit Pandit
31	Shri M. Palaniappan
32	Shri S.R.Karkhanis
33	Shri G S Rao
34	Shri Krishnajith M U

APPENDIX 2

List of Objectors / Persons participated in Public Hearing