Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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Case No. 114 of 2008

IN THE MATTER OF

Maharashtra State Electricity Transmission Company Ltd.'s (MSETCL) Petition for approval of Annual Performance Review for FY 2008-09 and Aggregate Revenue Requirement for FY 2009-10

Shri V. P. Raja, Chairman
Shri A. Velayutham, Member
Shri S. B. Kulkarni, Member

ORDER

Date: May 28, 2009

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 2008-09 and Aggregate Revenue Requirement (ARR) for FY 2009-10, 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 2008-09, determines the revenue requirement for MSETCL for FY 2009-10, as under:

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List of Abbreviations

ABT	Availability Based Tariff
A&G	Administration & General Expenses
AAD	Advance Against Depreciation
ARR	Annual Revenue Requirement
BEST	Brihan-mumbai Electric Supply & Transport Undertaking
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 for FY 2008-09 and determination of revenue requirement for FY 2009-10.

MSETCL is a Company formed under the Government of Maharashtra 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 above-said 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, with the Commission (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 or 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, MSETCL has included the said amount as Prior Period Expenses in the truing-up for FY 2007-08. The Commission has incorporated the impact of the same in this Order.

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

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*." The Commission had directed MSETCL to submit the Petition for Annual Performance Review latest by November 30 of each year in line with the Regulation 9.1 of the MERC Tariff Regulations.

MSETCL submitted its Petition for Annual Performance Review for FY 2008-09 and determination of revenue requirement for FY 2009-10 on November 27, 2008, based on actual audited expenditure for FY 2007-08, actual expenditure for first half of FY 2008-09, i.e., from April to September 2008 and revised estimated expenses for October 2008 to March 2009, and projections for FY 2009-10. MSETCL, in its Petition, requested the Commission to

- approve the ARR proposed by MSETCL for FY 2007-08, FY 2008-09 and FY 2009-10 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 2008-09 along with revenue requirement of FY 2009-10 as per the Petition.

The Commission, vide its letter dated December 22, 2008, forwarded the preliminary data gaps and information required from MSETCL. MSETCL submitted its replies to preliminary data gaps and information requirement on January 7, 2009 and January 12, 2009.

The Commission scheduled a Technical Validation Session (TVS) on MSETCL's Petition for APR for FY 2008-09 and Revenue Requirement for FY 2009-10, on January 15, 2009, in the presence of authorised Consumer Representatives authorised on a standing basis under Section 94(3) of the Electricity Act, 2003 to represent the interest of consumers in the proceedings before the Commission. 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.

1.9 ADMISSION OF PETITION AND PUBLIC PROCESS

MSETCL submitted its responses to the queries raised during the TVS along with the revised Petition on February 18, 2009, and the Commission admitted the APR Petition of MSETCL on February 20, 2009.

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 February 23, 2009. 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 expressing concerns on procedural issues and transmission losses. The Public Hearing was held on March 23, 2009 at 11:00 hours at the **Commission's Office at 13th Floor, Centre 1, World Trade Centre, Cuffe Parade, Mumbai-400 005**. The list of objectors, who participated in the Public Hearing, is provided in **Appendix-1.**

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 2007-08, Annual Performance Review of FY 2008-09 and determination of revenue requirement of MSETCL for FY 2009-10. 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.

1.10 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 2007-08, including sharing of efficiency gains/losses due to controllable factors.
- **Section 4** of the Order comprises the Review of Performance for FY 2008-09, 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 2009-10.

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

2.1 Non Compliance with Regulations and increase in Tariff

Bharatiya Udhami Avam Upbhokta Sangh has registered their objection against approval of the APR and ARR of the Petitioner claiming that the petitioner has failed to comply with provisions of various Regulations such as MERC (Standard of Performance of Distribution Licensees, Period of Giving Supply and Determination of Compensation) Regulations, 2005, MERC (Terms & Conditions of Tariff) Regulations, 2005 and MERC (Electric Supply Code & other Condition of Supply) Regulations, 2005. According to the Sangh, the Petitioner has not complied with the aforesaid Regulations in providing electric supply connections to consumers under Municipal Corporation areas on the basis of connected load and not following the stipulations of the aforesaid Regulations to supply such consumers on the basis of sanctioned load or contract demand limits applicable to such consumers as specified in the Regulations. The Sangh also submitted that the petitioner has not followed the mandatory provisions of the aforesaid Regulations for approval of PPA as enumerated for short term power purchase.

Members of the Kamala Vihar G Cooperative Housing Society expressed their strong protest against the proposed hike in the electricity charges and submitted that the present tariffs charged are already on a higher side compared to the ones charged by BEST from the residents of South Mumbai. They added that in spite of them being not as affluent as the people staying in South Mumbai, they are forced to pay much higher tariffs for electricity which their counterparts in South Mumbai gets at a lower price.

Based on information from various news papers, the Westminster Co-operative Housing Society Limited, anticipate a steep increase in the electricity tariffs and submitted that majority of members of their housing society are Retired Technical Persons from M/s. Swadeshi Mills Co Ltd which is now closed down and they find it very difficult to cope with any increase in the price of any living commodities including electricity. Hence they strongly oppose any proposed increase in electricity tariff.

Maker Arcade Co-operative Society Ltd. requested to not to increase electricity tariff any further so as to provide relief to their shop owners who according to them are already suffering from lack of business due to the present recession condition.

The tenants of Kalyan Bldgs No. 1&3 opposed the proposed hike in electricity charges as high as 18 to 42%, which is too high for them to bear, particularly under current situation of recession in the market. Further, they have requested to consider the burden of tariff hike on Public institutes, Hospitals, Schools and farmers. They also suggested to go for cheaper sources of power generation and urged to take necessary steps to reduce electricity bills by 10-15%.

The retail grain dealers co-operative society ltd. expressed their concern on a perceived increase of 18 to 45% in the electricity tariff and requested to reject the tariff proposal. According to them the shortfall in electricity is already causing hardship to industrial and agricultural consumers and above this the proposed increase will worsen the conditions. They added that the already high electricity tariff is one of the reasons for lesser economic development in the State.

MSETCL's Response

MSETCL submitted that it being a Transmission Company is responsible for Bulk transmission of electricity and the issue being discussed in the objections were pertaining to retail tariff and those should be referred to concerned distribution licensees. Further, MSETCL urged that the suggestions related to generation may be taken up with generation companies and at the same time confirming that any group or organisation building their own renewable based plants may be permitted to use transmission system through open access as per Regulation.

Commission's Ruling

The Commission observes that the objections raised by various objectors relates to retail tariff and not MSETCL's APR Petition. The objections as raised are misplaced. Nonetheless, the Commission is aware about the impact of significant increase in projected ARR by of transmission licensees, which will be ultimately passed on to the distribution licensees and shall result in retail tariff hike. The Commission has cautiously scrutinised every component of annual revenue requirement and have also passed appropriate rulings at various places through this Order.

3 TRUING UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2007-08

MSETCL, in its Petition for Annual Performance Review for FY 2008-09 and determination of revenue requirement for FY 2009-10 has sought final truing up of expenditure and revenue for FY 2007-08 based on actual expenditure and revenue as per audited accounts. MSETCL provided the comparison of actual expenditure against each head and the actual revenue with the approved expenditure and approved revenue along with the reasons for deviations.

MSETCL submitted the computation of sharing of gains and losses on account of interest on working capital under the truing up exercise for FY 2007-08. In accordance with Regulation 19 of the MERC Tariff Regulations, the Commission has approved the sharing of gains and losses due to controllable factors for FY 2007-08 for MSETCL in this Section.

3.1 O&M Expenses

Operation and Maintenance (O&M) expenditure comprises employee related costs, Administrative and General (A&G) Expenses, and Repair and Maintenance (R&M) expenditure. 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.

3.1.1 Employee Expenses

The Commission had approved gross employee expense of Rs 398.14 Crore and net employee expenses of Rs. 318.51 Crore for FY 2007-08, after capitalisation of employee expenses, in the APR Order for MSETCL for FY 2007-08. MSETCL submitted that the actual gross employee expenditure in FY 2007-08 was lower, at Rs. 366.96 Crore while the capitalisation rate was higher @ 34 % as against 21% considered by the Commission, with the result that the actual net Employee Expenses amounted to Rs. 248.44 Crore.

MSETCL submitted that the reduction in employee expense is primarily due to the fact that it had been unable to fulfil its envisaged quota of recruitment in different cadres of the organisation owing to pendency of manpower report from the consultancy firm engaged in this regard. MSETCL added that Fringe Benefit Tax (FBT) has been considered by MSETCL under employee expenses under the truing-up exercise.

The Commission, in its APR Order for FY 2007-08 (Case No. 70 of 2007), dated May 31, 2008 ruled that provisioning for earned leave encashment in FY 2006-07 amounting to Rs. 116 Crore had to be amortised over a period of five years for recovery from consumers to avoid impact on tariff. Thus, the Commission had approved Rs. 23.27 Crore on this account to be recovered each year from consumers, till the entire Rs. 116 Crore is recovered. The Commission had allowed the first instalment towards the same in the APR Order for FY 2007-08. MSETCL submitted that the Commission may include the second instalment towards the same while truing up employee expenses of FY 2007-08, as a deferred expenditure already approved by the Commission. The Commission has approved the same in line with its earlier Order in the matter.

The Commission has analysed the actual employee expenses for FY 2007-08 under various heads vis-à-vis the actual expenditure in FY 2006-07. Considering the details of actual employee expenses and reasons submitted by MSETCL for decrease in employee expenses, the Commission has allowed the actual employee expenses under the truing up exercise for FY 2007-08. Further this reduction in employee expenses has been considered as a controllable gain and is shared in accordance with stipulations of the Tariff Regulation. The capitalisation of the employee expenses in FY 2007-08 has been considered on the basis of actuals and in line with the audited financial statements submitted by MSETCL. 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 2007-08 (Rs. Crore)

Sl	Particulars	APR Order	Audited	Allowed after Truing Up
1	Gross Employee Expenses	398.14	366.96	366.96
2	Capitalisation	79.63	118.52	118.52
3	**Net Employee Expenses**	**318.51**	**248.44**	**248.44**

3.1.2 A & G Expenses

The Commission had approved gross A&G expenses of Rs. 50.84 crore, and net A&G expenses of Rs. 43.21 Crore for FY 2007-08, in its APR Order for FY 2007-08, based on year-on-year (YoY) increase of 5.29% over the A&G expenses of FY 2006-07. The A&G expenses were capitalised at the rate of 15% in accordance with MSETCL's projections. MSETCL submitted that the actual gross A&G expenses in FY 2007-08 were higher, at Rs. 67.69 Crore and the capitalisation rate was also higher @ 19.45% as against 15% considered by the Commission, with the result that the actual net A&G expenses amounted to Rs. 54.52 crore. MSETCL submitted that the primary reason for the increase in FY 2007-08 was the higher capital works undertaken during the year.

Further, MSETCL submitted that the Commission had disallowed the lease rent paid by MSETCL to MSEB Holding Company in the previous years based on the following reason as mentioned in the earlier Order:

> *"Payments being made by MSETCL against lease rent to the MSEB Holding Company, cannot be allowed as a pass through expense, in the absence of any concrete justification for the same. The propriety of the lease rents being charged needs to be assessed against the prevailing market rates, clarity whether the assets for which the lease rents are being charged are on the assets of the Holding Company, etc. Moreover, the provisional Transfer Scheme is also yet to be finalised, even though the provisional Transfer Scheme was notified almost three years ago. Hence, there is no clarity whether the charging of lease rents is justifiable. Moreover, even if the concerned assets are on the books of the Holding Company, the Commission is of the view that it is improper to charge lease rent to MSETCL, which in turn will be passed on largely to the consumers of MSEDCL, who have already contributed through tariffs for the creation of such assets."*

Further, while truing up of "**Other Expenses**" for FY 2006-07 as per audited accounts, Commission observed as under:

> *"Under the truing up exercise, MSETCL has submitted that the actual expenditure under this head is Rs. 10.43 crore, which mainly comprises lease rent paid to MSEB*

Holding Co. for FY 2005-06 and loss on foreign exchange rate variation. Since the Commission has disallowed the lease rent payable to the MSEB Holding Company, the prior period expense of Rs. 9.05 crore, included under Other Expenses on this account has been disallowed."

In this regard MSETCL submitted that such disallowance was impacting the cash flow of MSETCL. MSETCL added that the expense was actually and legitimately incurred and provided documentary evidence for the same by submitting copy of lease agreement for the same as required by the Commission. Further in response to the Commission's queries, MSETCL also provided rationale for the following:

- Propriety of the lease rent being charged
- Prevailing market rate for lease rent vis-à-vis actuals
- Status of Final Transfer Scheme

MSETCL requested the Commission to true up the actual lease rent paid to the MSEB Holding Company in FY 2007-08, amounting to Rs. 9.53 Crore and included in the actual A&G Expense of FY 2007-08. MSETCL also requested the Commission to allow the lease rent of Rs. 10.26 Crore disallowed for FY 2006-07 and the lease rent of Rs. 9.05 Crore disallowed for FY 2005-06, which were disallowed in the Order dated May 31, 2008 in Case No. 70 of 2007.

The Commission has verified the submissions made by MSETCL towards the lease rent expense incurred for FY 2005-06, FY 2006-07 and FY 2007-08, and the Commission under the truing up of A&G expenses for FY 2007-08, has considered the lease rent paid to MSEB Holding Company as incurred by MSETCL for FY 2005-06, FY 2006-07 and FY 2007-08.

In response to the Commission's query on reasons for increase in other components of A&G expense by Rs 7.32 Crore, MSETCL submitted that the increase is mainly on account of (a) conveyance and travel costs due to hike in fuel prices, (b) security related costs due to enhanced threat to assets, (c) purchase related costs due to increased cost on tender publication and other purchase related activities, and (d) increase in electricity charges. The Commission observes that under MYT regime, the Commission has approved A&G expense after considering audited results for FY 2006-07 as the base and allowing for escalation factor on account of Consumer Price Index (CPI)/Wholesale Price Index (WPI). Thus, variation between allowed expenses and actual expenses will have to be considered as a controllable loss/gain, and will have to be shared between MSETCL and the distribution licensees, in accordance with Regulation 19 of the MERC Tariff Regulations. Accordingly, for the purpose of true-up of A&G expense for FY 2007-08, the Commission has only considered A&G expenses approved in the APR Order in addition to lease rent as already elaborated earlier. Accordingly, gross A&G expense for FY 2007-08 allowed after truing-up amounts to Rs. 60.37 Crore (i.e., Rs. 50.84 Crore + Rs. 9.53 Crore towards lease rent for FY 2007-08).

The capitalisation of the A&G expenses has been considered at the rate of 15%, as approved by the Commission in the previous Order. Further, the Commission has considered lease rent for FY 2006-07 (Rs. 10.26 Crore) and FY 2005-06 (Rs. 9.05 Crore). 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 2007-08 **(Rs. Crore)**

Sl	Particulars	APR Order	Audited	Allowed after Truing Up
1	Gross A&G Expenses	50.84	67.69	60.37
2	Capitalisation	7.63	13.17	9.06
3	**Net A&G Expenses**	**43.21**	**54.52**	**51.31**
4	Lease rent payable to MSEB HCL for FY 2006-07 disallowed earlier		10.26	10.26
5	Lease rent payable to MSEB HCL for FY 2005-06 disallowed earlier		9.05	9.05
6	**Total A&G Expense**		**73.83**	**70.62**

3.1.3 R&M Expenses

The Commission had approved net R&M expenses of Rs. 165.35 Crore for FY 2007-08, in its APR Order for FY 2007-08. MSETCL submitted that the actual net R&M expenditure in FY 2007-08 was higher at Rs. 246.56 Crore and the capitalisation rate was @ 0.76%. MSETCL further submitted a note on actual R&M activities carried out during FY 2007-08.

In the Petition, MSETCL submitted that nearly 37% of its substations are more than 20 years old, as compared to designed life span of 25 years, which is prone to reduce due to environmental effects, unexpected variation in voltage, overloading, inadequate maintenance and other reasons. MSETCL added that when MSETCL was part of erstwhile MSEB, the focus of repairs and maintenance were more on the distribution and generating assets, and adequate maintenance of the transmission network could not be taken up due to paucity of funds. To maintain more than 98% availability, MSETCL is constrained to deploy extra resources in maintaining the substations and lines to a high standard. MSETCL added that the benefits that are expected to be derived from the R&M activities being undertaken are:

a) Reduced failure of equipment before their expected life.
b) Equipment will give optimum output as they are continuously in service
c) Increase in system availability
d) Reduction in system losses
e) Continuous and quality supply to consumers.

While truing up R&M expenses for FY 2006-07 in the APR Order for FY 2007-08 (Case No. 70 of 2007), the Commission had observed as under:

> *"The Commission asked MSETCL to submit the details of expenditure undertaken against each sub-activity indicated by MSETCL and the benefits that have been realised. MSETCL replied that it was not possible to provide that kind of detail, which is not a satisfactory reply. MSETCL has to be able to quantify the benefits of all R&M activities undertaken, since it has claimed that the activities are being carried out*

with the intention of reducing system losses, increase in system availability, etc, which are easily quantifiable. While the Commission promotes good maintenance practices, the same cannot be bereft of quantity of benefit. For the purpose of this Order, the Commission has allowed this expenditure, ***however, MSETCL should strive to ensure that such R&M expenses are undertaken only after the intended benefits are known and the same are also monitored while undertaking the expense, control and even reduce the same." (emphasis added)***

The Commission observes that the R&M expense as submitted by MSETCL for FY 2007-08 is far higher at Rs 246. 65 Crore as against the R&M expenses of Rs 165.35 Crore approved in the APR Order for 2007-08. Further, in response to the Commission's query on justification for such increase in R&M expense, MSETCL has cited need for frequent maintenance due to age of assets, over-loading conditions, weather condition effects in coastal and industrial regions leading to corrosion/rusting, etc. MSETCL has also highlighted hot-line maintenance requirement, which is more expensive, in order to maintain system availability as the reason for the increase in R&M expense. While MSETCL has indicated the benefit of increased availability for Vashi Zone, it has not provided quantification of such benefit for any other zone, viz., Nashik, Karad, Aurangabad, etc. Further, MSETCL has not quantified any other benefits as claimed earlier in terms of reduced interruptions, reduction in transmission losses, etc. In fact, in Vashi zone, it has claimed higher number of interruptions as the reason for claiming increase in R&M activities and R&M costs thereof.

The Commission holds that activities like hot line maintenance, etc., are part of routine R&M and cannot be cited as reason for additional expenses. Also, the Commission observes that under the MYT regime, the Commission has approved R&M expenses after considering audited results for FY 2006-07 as the base and allowing for escalation factor on account of Wholesale Price Index (WPI). Thus, variation between allowed expenses and actual expenses will have to be considered as a controllable loss/gain, and will have to be shared between MSETCL and the distribution licensees, in accordance with Regulation 19 of the MERC Tariff Regulations. In view of the above, for the purpose of truing up, the Commission has considered the amount allowed in its APR Order for FY2007-08. 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 2007-08 (Rs. Crore)

Sl	Particulars	APR Order	Audited	Allowed after Truing Up
1	Net R&M Expenses	165.35	246.56	165.35

3.2 Depreciation and Advance against Depreciation

The Commission, in its Order dated May 31, 2008, had permitted depreciation to the extent of Rs 312.17 Crore for FY 2007-08, which amounts to 3.48% of Opening level of Gross Fixed Assets (GFA) of MSETCL for FY 2007-08, which was stated at Rs 8964.60 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 2007-08 was Rs 312.20 Crore, at an overall depreciation rate of 3.48%, corresponding to opening GFA of Rs 8965.25 Crore. Further, MSETCL claimed repayment of principal on long term loans during FY 2007-08 amounting to Rs. 430.42 Crore. Therefore, MSETCL has claimed total regulatory depreciation including advance against depreciation (AAD) of Rs 430.42 Crore comprising depreciation claim of Rs 312.20 Crore and AAD claim of Rs 118.22 Crore as against depreciation and AAD of Rs 443.09 Crore approved by the Commission.

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, as against permitted capitalisation of Rs 763.81 Crore under its previous APR Order, actual capitalisation as submitted by MSETCL during FY 2007-08 amounted to Rs 867.14 Crore. The Commission has verified the actual capitalisation claimed by MSETCL as against the capex schemes already approved by the Commission and has allowed a capitalisation of Rs 245.05 Crore, the rationale for which is explained in the subsequent sub-section on capital expenditure in this Order. This has resulted in significant reduction of the loan repayment amount to Rs. 337.68 Crore as against MSETCL's submission of Rs 430.32 Crore. The Depreciation expenditure including AAD approved by the Commission for FY 2007-08 has been summarised in the following Table:

Table: Depreciation Expense for FY 2007-08 (Rs. Crore)

Particulars	APR Order	Audited	Allowed after truing up
Opening GFA	8964.60	8965.24	8965.25
Depreciation	312.17	312.20	312.20
Depreciation Rate	3.48%	3.48%	3.48%
Loan Repayments	443.09	430.42	337.68
AAD	130.92	118.22	25.48
Depreciation including AAD	**443.09**	**430.42**	**337.68**

3.3 Capital expenditure and Capitalisation for FY 2007-08

MSETCL submitted that in FY 2007-08, it has incurred capital outlay to the extent of Rs 1111.60 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. 976.15 Cr from Rural Electrification Corporation (REC) and Power Finance Corporation (PFC), and the remaining amount was funded through internal accruals. MSETCL added that the capital expenditure includes capex schemes amounting to Rs 369.28 Cr as approved by the Commission. However, the remaining capital expenditure pertains to non-DPR related projects. The capitalisation considered by the Commission in the APR Order, and the actual capitalisation as submitted by MSETCL have been summarised in the following Table.

Table: Capitalisation for FY 2007-08 (Rs. Crore)

Particulars	FY 2007-08	
	APR Order	Actual
DPR schemes	697.92	197.21
Non DPR schemes	65.89	669.93
Total Capitalisation	**763.81**	**867.14**

In response to the Commission's query, MSETCL confirmed that it has only considered capitalisation of schemes with outlay more than Rs 10 Crore in respect of capex schemes that have been approved by the Commission. It is observed that out of capital expenditure of Rs

1111.60 Crore, capital outlay for Non-DPR schemes amounts to Rs 742.32 Crore and out of capitalisation of Rs 867.14 Crore, capitalisation of Non-DPR schemes amount to Rs 669.93 Crore for FY 2007-08, which is very high.

In response to the Commission's query on the justification and rationale for very high capitalisation of Non DPR schemes, MSETCL submitted that these schemes are of the nature of evacuation, new substation, Life extension, link lines, transformer addition, and replacement and most of these completed schemes were approved by the erstwhile MSEB (prior to un-bundling during 2005). Most of these are having costs of Rs. 10 Crore and above, but, since they were approved prior to issue of capital expenditure approval guidelines by the Commission, and were therefore not approved by the Commission, hence, they have been categorised as "Non-DPR" schemes. Further, MSETCL submitted that as it has recognised all schemes costing Rs. 10 Crore and above, which are approved by the Commission, since formation of MSETCL, i.e., from FY 2005-06, as DPR schemes, all others have been considered as Non DPR schemes.

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 Cr, as depicted under following table:

(Rs Crore)

	FY 2007-08	
Particulars	Capital Expenditure	Capitalisation
Approved DPR Schemes	468.8	179.16
DPR schemes submitted but under consideration	24.05	18.05
Non-DPR Schemes > Rs. 10 Crore	191.98	263.58
Non-DPR Schemes <= Rs. 10 Crore	426.77	406.35
Total	1111.6	867.14

It is evident from the above Table that capitalisation of Non-DPR schemes amounted to Rs 669.93 Crore comprising "Non"-DPR schemes with capital outlay exceeding Rs 10 Cr (Rs

263.58 Cr) and Non-DPR scheme with capital outlay below Rs 10 Cr (Rs 406.35 Cr). MSETCL has claimed that all such Non-DPR schemes were initiated during MSEB period prior to corporatisation (June 2005) In this context, it is worthwhile to refer to MSETCL's submission as regards 'Ongoing Schemes' under MYT Order (Case 67 of 2006) dated April 2, 2007.

"MSETCL Submission:

Non-DPR Schemes – Capital Expenditure

Scheme Description	***Non-DPR Schemes (Rs Crore)***			
	FY 2007-08	***FY 2008-09***	***FY 2009-10***	***TOTAL***
Ongoing schemes	*34.92*	*8.95*	*2.00*	***45.87***
New schemes	*144.52*	*148.63*	*69.92*	***363.07***
Augmentation schemes	*19.25*	*23.75*	*5.00*	***48.00***
ORC schemes	*9.95*	*0.00*	*0.00*	***9.95***
R&M schemes	*63.65*	*14.56*	*2.00*	***80.21***
TOTAL	***272.28***	***195.89***	***78.92***	***547.09***

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.

In this regard, the Commission in its APR Order for Maharashtra State Electricity Transmission Company Limited (MSETCL) for FY 2007-08 as well as the MYT Orders for Utilities had observed as under:

> *"However, the Commission would like to reiterate that in-principle approval of the scheme does not absolve the senior management of MSETCL of their responsibility to prioritise various schemes and undertake cost benefit analysis and financial analysis to validate the commercial prudence of each scheme. MSETCL should ensure that the projected benefits actually accrue for the benefit of the stakeholders. It would be essential to monitor progress of each scheme as well as track expenditure and benefits accrued as per the scheme."*
>
> …
>
> *"The increase in quantum of Non-DPR schemes indicates an unhealthy trend, as the Commission feels that there is a tendency to split distribution scheme so that capital outlay of the scheme is below Rs. 10 Crore, to escape regulatory scrutiny. The Commission will take a review of the schemes being classified under Non-DPR category, and in case it is found that these schemes should have ideally been classified under DPR category, then that capex and the related capital charges will be disallowed till the DPR is submitted and the scheme is approved by the Commission."*

Further, the total amount spent/proposed to be spent under Non-DPR schemes, being without Commission's scrutiny, should not be significant in the total amount of capex spent/proposed to be spent, as otherwise, it will defeat the purpose of regulatory oversight on this important item of expenditure.

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. The Commission may also undertake, if required, a detailed independent technical/financial audit of the “Non”- DPR schemes of the erstwhile MSEB period.

For the purpose of truing up of expenses for FY 2007-08, the Commission is of the view that the benefits of such 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. Thus, against the submission of MSETCL the Commission is retaining the capitalisation for Non-DPR schemes as considered in its APR Order. Further, for DPR schemes, actual capitalisation after deducting DPR schemes yet to be approved by the Commission has been considered. Accordingly, the Commission has considered the capitalisation for FY 2007-08 as shown in the table below.

Table: Capitalisation for FY 2007-08 as per Commission ***(Rs. Crore)***

Particulars	**FY 2007-08**		
	APR Order	**Actuals**	**Allowed after truing up**
DPR scheme	697.92	197.21	179.16
Non DPR scheme	65.89	669.93	65.89
Total Capitalisation	**763.81**	**867.14**	**245.05**

3.4 Interest Expenses

The Commission under its earlier Order dated May 31, 2008 had approved interest cost of Rs 203.44 Crore, after considering the interest expenditure on debt corresponding to capitalised assets only. MSETCL submitted that actual interest expenses of MSETCL during FY 2007-08 for long term loans, net of capitalisation, amounted to Rs 194.21 Crore, and was less than that approved by the Commission in its Tariff Order. The main reason submitted by MSETCL for reduction in interest expenses is that the actual interest capitalisation of Rs 36.73 Crore has been higher than interest capitalisation of Rs 16.01 Crore as considered in the APR Order, resulting in lower net interest expense.

Further, in reply to the Commission's query, MSETCL submitted the following.

- Copies of the agreements with REC and PFC during the period from January 1, 2008 to December 31, 2008.
- Summary Sheet of new loans drawn, repaid and interest computations for REC and PFC during the period from January 1, 2008 to December 31, 2008

In this context, the Commission observes that MSETCL has computed interest expenses considering loan addition of Rs 976.15 Crore during FY 2007-08 as against its proposed capitalisation of Rs 867.14 Crore. The Commission reiterates that 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 245.05 Crore during FY 2007-08 as against the total capitalisation of Rs 867.15 Crore proposed by MSETCL. 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. 51.23 Crore and Rs 80 Crore, respectively. After adjustments for funding through consumer contribution and grants, the remaining capitalisation has been considered as funded by way of debt: equity of 80:20 as proposed by MSETCL. In view of the above, the Commission has recomputed the interest expenses for FY 2007-08. The interest rate for the Public bonds, LIC loan 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. As regards interest capitalisation, the same should be monitored and computed scheme-wise. In the absence of scheme-wise capitalisation and funding details, the Commission has considered ratio of IDC (Rs 36.73 Crore) to total capitalised asset value (Rs 867.14 Crore) as claimed by MSETCL, which amounts to 4.24%, to determine interest capitalisation of Rs 10.38 Crore corresponding to approved capitalisation of Rs 245.05 Crore.

Accordingly, the Commission approves the net interest expense for FY 2007-08 as summarised in the following table:

Table: Interest Expense for FY 2007-08 (Rs. Crore)

Particulars	**APR Order**	**Audited**	**Allowed after truing up**
Opening balance of loan	1941.18	1941.18	1941.18
Additions	611.04	976.15	91.05
Repayment	(443.09)	(430.42)	(337.68)
Closing balance of loan	2109.13	2486.91	1694.55
Gross Interest expenses	**220.40**	**231.91**	**191.19**
Less: SLDC apportionment	(0.95)	(0.96)	(0.96)
Less: IDC	(16.01)	(36.73)	(10.38)
Net Interest expenses	**203.44**	**194.21**	**179.85**

3.4.1 <u>Other Interest and Finance Charges</u>

Other Interest and Finance Charges comprise the following heads:

§ Guarantee fee payable to Government of Maharashtra (GoM) for long term loans taken from lenders

§ Other finance charges

The Commission had approved other interest and finance charges of Rs. 30.50 Crore for FY 2007-08 in its APR Order for FY 2007-08. MSETCL submitted that the actual expenditure under Other Interest and Finance Charges was lower, at Rs. 26.06 Crore. 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 2007-08 (Rs. Crore)

Sl	Particulars	APR Order	Actuals /Audited	Allowed after Truing Up
1	Guarantee Fees & Finance Charges	30.50	26.06	26.06

3.4.2 <u>Interest on Working capital</u>

The Commission had approved interest on working capital of Rs. 39.49 Crore for FY 2007-08 in accordance with the MERC Tariff Regulations. The rate of interest on working capital loans for FY 2007-08 had been considered as 11.50%. MSETCL submitted that working capital requirement for FY 2007-08 has been worked out based on the audited accounts of MSETCL and the norms. For computation of interest, MSETCL has considered the short term PLR of State Bank of India as was prevailing on 1st April 2007, which was 12.25%. Further, in its Petition, MSETCL submitted that it has not actually incurred any expenditure towards interest on working capital during FY 2007-08. Accordingly, MSETCL proposed interest on working capital of Rs 49.45 Crore during FY 2007-08.

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 11.50%, the

Commission has considered the interest rate of 11.50 % for estimating the normative interest on working capital, which works out to Rs 42.46 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 2007-08 **(Rs. Crore)**

Sl	Particulars	APR Order	Actuals /Audited	Allowed after Truing Up
1	Interest on Working Capital	39.49	49.45	42.46

3.5 Contribution to Contingency Reserves

The Commission had considered contribution to contingency reserves at 0.50% of opening GFA in accordance with the MERC Tariff Regulations, in the APR Order for FY 2007-08. 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, 2007 from MSETCL, and MSETCL submitted the Opening Balance as Rs 42.26 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 0.5% of opening GFA during FY 2007-08 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	44.82	44.83	44.83

3.6 Income Tax

MSETCL, in its APR Petition for FY 2007-08 dated November 30, 2007, projected income tax payable for FY 2007-08 as Rs. 29.69 Crore and the Commission vide its Order in Case No. 70 of 2007 had approved the same. However, for FY 2007-08, MSETCL submitted that the actual income tax paid is Rs. 96.50 Crore. In reply to the Commission's query on the reasons for this substantial increase, MSETCL submitted that while filing its APR Petition for FY 2007-08, MSETCL had considered Minimum Alternate Tax (MAT) rate of 11.22%, considering benefit of unabsorbed depreciation and accumulated losses, accordingly advance tax of Rs. 34.17 Cr was paid in the FY 2007-08 based on book profit (as against income tax of Rs. 29.69 Crore approved as per APR Order). Further, tax deducted at source, etc., amounting to Rs. 6.63 Crore, was also paid as a regular ongoing activity. However, at the time of finalization of accounts, it was observed by MSETCL that the set-off benefits of earlier years were not sufficient to set off the business income as per IT calculations to be eligible to avail MAT. As a result, MSETCL attracted IT at the higher rate of 33.99%, which resulted in self assessment tax of Rs. 55.70 Crore (over and above the advance tax and TDS), which was paid in August 2008.

MSETCL submitted the supporting Challans of actual income tax payment for FY 2007-08, amounting to Rs. 96.50 Crore, and requested for truing up the same. However, MSETCL has attracted interest due to the delayed payment of income tax, amounting Rs. 2.47 Crore. In this context, the Commission observes that interest paid by MSETCL on account of delayed payment of income tax, is not an expense properly incurred. The Licensee is supposed to pay income tax on time as good governance. Any fall out of poor governance and consequential financial implication / burden should not be passed on to consumers. For example: - any penalty paid by the Licensee will not be passed on to the consumers. Accordingly, under the truing exercise, the Commission has considered the actual income tax, but has disallowed the interest paid by MSETCL on account of delayed payment of income tax. The summary of the income tax as allowed for FY 2007-08 is shown below:

Table: Income Tax for FY 2007-08 **(Rs. Crore)**

Sl	Particulars	APR Order	Actuals /Audited	Allowed after Truing Up
1	Income Tax	29.69	96.50	94.03

3.7 OTHER EXPENSES

In the APR Order for FY 2007-08, the Commission had allowed other expenses of Rs. 1.38 Crore, comprising loss on obsolescence of fixed assets, loss on exchange rate variation, and compensation for injuries, death and damages as submitted by MSETCL in its Petition. Under the truing up exercise, MSETCL submitted that the actual expenditure under this head is Rs. 9.48 Crore. The major reason for the wide variance is on account of writing off of Rs. 9.05 Crore of wheeling charges to Goa for the period from October 2006 to March 2007. MSETCL submitted that this expense relates to writing off the unpaid amount of transmission charges for which invoices were raised by MSETCL on Electricity Department, Goa, for wheeling of central sector power in accordance with the Commission's earlier Orders.

The Commission had directed MSETCL in Order dated June 28, 2006 in Case No. 49 of 2005 to levy transmission charges for wheeling power to Goa for use of MSETCL network. MSETCL started raising invoices to Goa from October 2006 according to the said directive. However, the matter was disputed by Goa Electricity Department and they preferred an appeal before the ATE against the Commission's Order. The ATE Judgment in this regard upheld the appeal of Goa Electricity Department contending that the Commission had no jurisdiction in the matter and therefore, set aside the Commission's Order and directed MSETCL to withdraw the bills raised and also directed MSETCL to adjust all the payments made by Goa Electricity Department against such invoices so that Goa Electricity Department ultimately pays only the amount determined by Western Region Power Committee (WRPC) according to the existing methodology of payment. In line with the above ATE Judgment, the Commission, in Section 4.16 of its Order dated May 31, 2007 in Case No. 70 of 2007, observed, *"….true up of revenue on account of Goa wheeling for FY 2006-07 and FY 2007-08 shall be undertaken once MSETCL revises its bill based on adjustments in line with Hon'ble ATE Judgment cited above."* MSETCL submitted that the Commission has already trued up revenue of Rs. 13.51 Crore towards transmission open access charges from Goa for FY 2006-07, for which MSETCL had raised bills as per the Commission's Order dated June 28, 2006 in Case No. 49 of 2005, for the billing period from October 2006 through March 2007. As the ATE Judgment was issued on December 17, 2007, MSETCL did not have an opportunity to reverse its bills raised till March 2007, which corresponds to FY 2006-07. Therefore, the same had been booked as accrued revenue in the accounts of MSETCL in FY 2006-07, though actually Goa had not paid any amount against these invoices. As financial accounts for FY 2006-07 had already been finalised, MSETCL could not reverse the bills raised retrospectively, and hence, it has written off the net amount not paid by Goa Electricity Department in FY 2007-08.

The Commission has allowed the actual Other Expenses under the truing up exercise based on audited accounts, since this adjustment has been made subsequent to the ATE Order in this regard.

3.8 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 of Rs 398.88 Crore for FY 2007-08 as compared to ROE of Rs 397.43 Crore approved by the Commission in its APR Order dated May 31, 2008.

In this context, the opening regulatory equity of Rs 2762.56 Crore for FY 2007-08 as claimed by MSETCL needs to be adjusted for the consumer contribution and grants used to fund assets capitalised during previous years. The MERC Tariff Regulations stipulates as under:

"50.1.1 The Transmission Licensee shall be allowed a return at the rate of 14 per cent per annum, in Indian Rupee terms, on the amount of approved equity capital:

> *Explanation I – for the purpose of this Regulation, equity capital shall be the sum total of paid-up equity capital, preference share capital, fully / compulsorily convertible debentures (or other financial instruments with equivalent characteristics), foreign currency convertible bonds, share premium account and any reserves, available for distribution as dividend or for capitalization by way of issue of bonus shares, which have been invested in the Transmission Business.* ***The amount of any grant, revaluation reserve, development reserve, contingency reserve and contributions from users shall not be included in the equity capital.*** *The amount reflected in the books of account as deferred tax liability or deferred tax asset of the Transmission Business shall be added or deducted, as the case may be, from the amount of equity capital." (**emphasis added**)*

Based on audited accounts of MSETCL for FY 2006-07, it is observed that the capital assets have been funded to an extent of Rs 32.45 Crore through consumer contribution and Rs 68.58 Crore through grants. Accordingly, opening regulatory equity for FY 2007-08 amounts to Rs 2742.22 Crore. Further, as elaborated under earlier paragraphs on interest on long term loans, the assets capitalised during FY 2007-08 of Rs 245.05 Crore have been funded through consumer contribution and grant to the extent of Rs 51.23 Crore and Rs 80 Crore, respectively. Thus, balance capitalised assets have been considered to be funded through debt: equity ratio of 80:20. Accordingly, regulatory equity addition during FY 2007-08 has been considered as Rs 22.76 Crore.

The Commission has computed the RoE for FY 2007-08 on the opening balance of equity and on 50% of equity contribution towards the assets capitalised during the year, in accordance with Regulations 50.1, 46, and 47 of the MERC Tariff Regulations as applicable for the transmission business.

In addition, while allowing ROE of Rs 382.09 Crore for FY 2006-07 in the APR Order dated May 31, 2008, the regulatory equity addition was not adjusted to the extent of capitalised assets funded through consumer contribution and grants by MSTECL for FY 2006-07. However, in accordance with the MERC Tariff Regulations, the ROE has to be computed based on actual or normative equity contribution, after deducting the funding through consumer contribution and grants, as reproduced above. Thus, MSETCL is not entitled to ROE on the amount of assets capitalised, which has been funded through consumer contribution and grants, and the licensee cannot be allowed to retain something to which it is not entitled to. Hence, in the truing up exercise for FY 2007-08, the Commission has disallowed the corresponding amount towards excess RoE component to the extent of Rs 1.41 Crore allowed during FY 2006-07, and has deducted the same from the ROE computations for FY 2007-08.

The summary of RoE as projected by MSETCL and approved by the Commission for FY 2007-08 is summarised in the following Table:

Table: Return on Equity for FY 2007-08 (Rs. Crore)

Particulars	**FY 2007-08**		
	APR Order	**Actual**	**Allowed after truing up**
Regulatory Equity at the beginning of the year	2762.42	2762.56	2742.22
Equity portion of assets capitalised during year	152.76	173.20	22.76
Regulatory Equity at the end of the year	2915.18	2935.76	2764.98
Return on Regulatory Equity at the beginning of the year	386.74	386.76	383.91
Return on 50% of Equity portion of capitalised asset value during the year	10.69	12.12	1.59
Total Return on Regulatory Equity	**397.43**	**398.88**	**385.50**
Less: Excess Return on Equity Allowed for FY 2006-07			(1.41)
Net Return on Regulatory Equity	**397.43**	**398.88**	**384.09**

3.9 Non Tariff Income

MSETCL earns Non Tariff Income from activities such as sale of scrap, sale of tender forms, interest on other investments, income from trading and miscellaneous receipts. The Commission had considered Non Tariff Income of Rs. 34.78 Crore in its APR Order for FY 2007-08. MSETCL submitted that the actual income under this head has been much higher, at Rs. 76.86 Crore.

MSETCL further submitted that the revenue from non- tariff income also includes Rs. 15.69 Crore of short-term open access charges. MSETCL submitted that in accordance with the Commission's Order dated June 27, 2006 in Case No. 58 of 2005 on "***Development of Transmission Pricing Framework for the State of Maharashtra and other related matters***", MSETCL proposed to retain 25% of the short-term open access charges, amounting to Rs. 3.92 Crore, under the truing-up of annual transmission charges for FY 2007-08.

MSETCL added that MSETCL, in its Petition in Case No. 70 of 2007 for Annual Performance Review of FY 2007-08, missed out to claim the benefit of retaining 25% of Short Term open access charges received during FY 2006-07, and the Commission also has not passed on this legitimate benefit to MSETCL while truing up for FY 2006-07 in its Order dated May 31, 2008. Therefore, MSETCL claimed this amount in the APR Petition for FY 2008-09, and adjusted the same under the truing up claim of non-tariff income. The total ST open access revenue received by MSETCL during FY 2006-07 was Rs. 0.7394 Crore, which was included in the non tariff income of Rs. 40.57 Crore of MSETCL during FY 2006-07. This entire amount of non-tariff income was trued up by the Commission without the benefit of retention of 25% by MSETCL. The summary of Non Tariff Income as submitted by MSETCL for truing up for FY 2007-08 is shown in the Table below:

Table: Non Tariff Income for FY 2007-08 (Rs. Crore)

Sl.	Particulars	APR Order	Audited
1	Non Tariff Income	34.78	80.97
2	Less: MSETCL's entitlement from Short Term Open Access Revenue in FY 2007-08 @ 25% of total ST Open Access Charges of Rs. 15.69 crore received during FY 2007-08		3.92
3	Less: MSETCL's entitlement from ST Open Access Revenue in FY 2006-07 @ 25% of total ST Open		0.18

Sl.	Particulars	APR Order	Audited
	Access Charges of Rs. 0.7394 crore received		
4	**Net Non-Tariff Income for truing up**	**34.78**	**76.86**

The Commission is the view that MSETCL's interpretation of the Commission's Transmission Pricing Order in Case No. 58 of 2005 dated June 27, 2006 is incorrect and inappropriate. MSETCL has incorrectly interpreted the relevance of paragraph 3.2.2 of the said Transmission Pricing Order, which only refers to practices prevalent for inter-State open access framework for regional transmission system as per CERC Inter-State Open Access Regulations applicable at that time. The Commission's Ruling in respect of short term transmission open access transactions for use of Intra-State transmission system (InSTS) is given under Para 3.2.5 of the said Order. The relevant extract of the same is reproduced below:

> *"3.2.5. Accordingly, the Commission **rules** as under:*
>
> …
>
> *3.2.5.6 The transmission charge in case of short term transmission open access transactions shall be denominated in Rs/MW/day or Rs/MW/Hr and shall be 25% of that applicable for long term transmission open access transactions. The short term transmission charges shall be payable for minimum 6 hours duration within a day and shall be accordingly 1/4th of short term transmission open access charge per day. **The recovery from short term transmission open access charges shall be used to reduce total transmission system charge (TTSC) for the intra-State transmission system and in turn benefit long term transmission system users." (emphasis added)***

Thus, it is evident that the revenue from short term open access transactions shall be entirely used to reduce total transmission system cost (TTSC) for the benefit of the long term transmission system users, and there is no merit in MSETCL's submission. Accordingly, the Non Tariff Income considered by the Commission for FY 2007-08 is as shown in the Table below:

Table: Non Tariff Income for FY 2007-08 (Rs. Crore)

Sl.	Particulars	APR Order	Audited/ MSETCL Petition	Allowed after truing up
1	Non Tariff Income	34.78	80.97	80.97

Sl.	Particulars	APR Order	Audited/ MSETCL Petition	Allowed after truing up
2	Less: MSETCL's entitlement from ST Open Access Revenue in FY 2007-08 @ 25% of total ST Open Access Charges of Rs. 15.69 crore received during FY 2007-08		3.92	0.00
3	Less: MSETCL's entitlement from ST Open Access Revenue in FY 2006-07 @ 25% of total ST Open Access Charges of Rs. 0.7394 crore received		0.18	0.00
4	**Net Non-Tariff Income for truing up**	**34.78**	**76.86**	**80.97**

3.10 Impact of Commission's Order in Case No. 40 of 2008

Subsequent to the APR Order for FY 2007-08, MSETCL filed a Review Petition (numbered as Case No. 40 of 2008) on July 7, 2008, seeking review of interest expenses. The Commission passed an Order dated September 12, 2008 and ruled that the interest expenses of Rs 2.82 Crore related to LIC debt restructuring premium would be considered at the time of APR Petition of MSETCL for FY 2008-09. MSETCL has included the said amount as "Prior-Period Expenses" in the Truing-up for FY 2007-08. Accordingly, the Commission has allowed the same.

3.11 Sharing of Gains and Losses for FY 2007-08

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 regard 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 2007-08 in Case No. 70 of 2007. 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 shared as efficiency loss and is treated 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 2009-10 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 is shown in the table below.

Table: Gain and loss due to variation in O&M expenses

(Rs Crore)

Sl. No.	Particulars	Previous Year (2007-08)						
		Approved by Commission	Actual	Approved after truing up (Entitlement as per Regulations/ Order)	Gain/ (Loss)	Efficiency Gain/(Loss) Shared with TSUs	Net Entitlement of MSETCL (before transferring to spl reserve)	Transferred to Reserve under Reg 19.1 (b)
1	Operation & Maintenance Expenses	527.07	568.83	484.41	(14.35)	(4.78)	559.27	
1.1	*Employee Expenses*	*318.51*	*248.44*	*248.44*	*70.07*	23.36	*295.15*	*23.36*
1.2	*Administration & General Expenses*	*43.21*	*73.83*	*70.62*	*(3.20)*	(1.07)	*71.69*	*(1.07)*
1.3	*Repair & Maintenance Expenses*	*165.35*	*246.56*	*165.35*	*(81.21)*	(27.07)	*192.42*	*(27.07)*

Interest on Working Capital

As discussed in the above paragraphs, the actual interest on working capital incurred by MSETCL during FY 2007-08 is nil and the normative interest on working capital approved by the Commission considering other elements of expenses as approved after truing up, works out to Rs 42.46 Crore. As per MSETCL's Petition, it has proposed to share the efficiency gains in line with the Commission's treatment of working capital in its APR Order (Case 70 of 2007). Accordingly, 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 a 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 2007-08 is given in the following Table:

Table: Summary of Truing up for FY 2007-08 including sharing of efficiency gains

Sl. No.	Particulars	Previous Year (2007-08)						
		Approved by Commission	Actual	Approved after truing up (Entitlement as per Regulations/ Order)	Gain/ (Loss)	Efficiency Gain/(Loss) Shared with TSUs	Net Entitlement of MSETCL (before transferring to spl reserve)	Transferred to Reserve under Reg 19.1 (b)
1	Operation & Maintenance Expenses	527.07	568.83	484.41	(14.35)	(4.78)	559.27	
1.1	*Employee Expenses*	*318.51*	*248.44*	*248.44*	*70.07*	23.36	*295.15*	*23.36*
1.2	*Administration & General Expenses*	*43.21*	*73.83*	*70.62*	*(3.20)*	(1.07)	*71.69*	*(1.07)*
1.3	*Repair & Maintenance Expenses*	*165.35*	*246.56*	*165.35*	*(81.21)*	(27.07)	*192.42*	*(27.07)*
2	Depreciation, including advance against depreciation	443.09	430.42	337.68			337.68	
3	Interest on Long-term Loan Capital	203.44	194.21	179.85			179.85	
4	Interest on Working Capital and on consumer security deposits	39.49	49.45	42.46	42.46	14.15	28.31	14.15
5	Other Interest and Finance Charges	30.50	26.06	26.06	0.00	0.00	26.06	0.00
6	Other Expenses (pls give details)	1.38	9.48	9.48			9.48	
7	Income Tax	29.69	96.50	94.03			94.03	
8	Prior-period adjsutments (Review Petition)		2.82	2.82			2.82	
9	Contribution to contingency reserves	44.82	44.83	44.83			44.83	
	Total Expenditure	**1319.48**	**1422.60**	**1221.62**	**28.11**	**9.37**	**1282.32**	**9.37**
B	**Return on Equity**	**397.43**	**398.88**	**384.09**			**384.09**	
C	**Aggregate Revenue Requirement**	**1716.91**	**1821.48**	**1605.71**			**1666.41**	
D	**Revenue**							
1	Revenue from transmission charges	**1682.13**	**1546.95**	1546.95			**1546.95**	
2	Income from wheeling central sector power to Goa		8.90	8.90			8.90	
3	Other Income	34.78	76.86	80.97			80.97	
	Total Revenue	**1716.91**	**1632.71**	**1636.82**			**1636.82**	
E	**True-up**							
1	**Revenue Surplus / (Gap)**	**0.00**	**(188.78)**	**31.11**	**0.00**		**(29.59)**	

Thus, the net revenue entitlement of MSETCL for FY 2007-08 works out to Rs. 1666.41 Crore, as compared to the revenue requirement of Rs. 1716.91 Crore allowed to MSETCL in the APR Order. Further, total revenue, allowed after final true-up, for FY 2007-08 amounts to Rs 1636.82 Crore comprising income from transmission tariff as Rs 1546.95 Crore, income from wheeling central sector power to Goa as Rs 8.90 Crore and Non-tariff income of Rs 80.97 Crore. Accordingly, revenue gap of Rs 29.59 Crore for FY 2007-08 has been considered after final true-up for FY 2007-08.

3.12 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 2007-08 as submitted by MSETCL and certified by Maharashtra State Load Despatch Centre (MSLDC) is given below:

Sl.	Transmission System	Normative Availability	Actual Availability
1	HVAC	98.00%	98.99%
2	HVDC	95.00%	92.28%

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%	1549.00	15.65
HVDC	14.96%	272.48	(7.80)
TOTAL	**100.00%**	**1821.48**	**7.85**

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 2007-08, 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%	1296.65	13.10
HVDC	14.96%	228.09	(6.53)
TOTAL	**100.00%**	**1524.74**	**6.57**

The Commission has included the above net incentive of Rs. 6.57 Crore in the Aggregate Revenue Requirement for FY 2009-10, which shall be payable by the Transmission System Users.

4 PERFORMANCE REVIEW OF FY 2008-09 AND DETERMINATION OF REVENUE REQUIREMENT FOR FY 2009-10

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 System Availability

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 directs MSETCL to arrange for requisite certification from MSLDC for FY 2008-09 and FY 2009-10 and also directs MSLDC to formulate appropriate procedure to monitor and certify the Transmission System Availability of various transmission licensees on regular basis.

Also, MSETCL is entitled for incentive on transmission system availability greater than 98% and 95% for HVAC and HVDC, respectively, in accordance with the method of computation of the incentive as elaborated in Section 3, while determining the incentive for FY 2007-08.

4.1.2 Energy Accounting and 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.

Energy Accounting and Interface ABT Metering

As regards the status of Interface ABT metering and energy accounting, MSETCL under its Petition has submitted as under:

> *"In the Order dated 28th June 2006 in case No. 49 of 2005 the Commission directed MSETCL that ABT billing and Energy Accounting is to be implemented by MSETCL. Accordingly ABT Metering scheme was initiated by MSETCL in phases. 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, M/s. Secure Meters Ltd. is allotted the work of installation of 9090 meters covering 481 Nos. of Sub-stations. In addition to this, 566 Nos. of inter utilities interface points in Mumbai Region are reported by TATA, REL, BEST on 27.9.2007, for which order was placed with M/s Secure Meters.*

Under the above programme there are 1906 interface locations to be metered in the MSETCL network. As on 31.10.2008, meters have been installed in 1796 interface locations. Out of these 1906 locations metering is commissioned at 1164 locations. Number of interface locations where meters are pending installation/commissioning is 742. Out of these 742 locations energy accounting is possible at 126 locations through other meters installed online. However due to various practical difficulties particularly at small hydro power stations like non-availability of appropriate size of CTs (turret type), non-availability of space for installation of outdoor type CTs, non-availability of metering core on existing CTs etc. meters could not be commissioned. Also, due to non availability of CT/PT connections, shifting of panels at some locations, non availability of space for installing CT/PT, non availability of outages etc. at other places about 470 meters are yet to be commissioned. The following table provides the status of metering for non-commissioning of balance meters.

Table 3-1 Status of Meters Installed for Interface Locations

Sr. No.	Particulars	Phase-II					Phase-I				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	1244	492	60	14	1810	19	43	34	96	1906
2	Interface locations installed	1208	492	60	0	1760	19	43	34	96	1856
3	Interface locations commissioned	999	9	60	0	1068	19	43	34	96	1164
4	Balance Interface locations	245	483	0	14	742	0	0	0	0	742
5	Energy accounting possible through other meters out of above 742 meters	126	0	0	0	126	0	0	0	0	126

Table 3-2 Zone-wise Status of ABT Meters Installed in MSETCL Area

Sr. No.	Name of Zone	EHV CONS (ABT)/ Transmission Lines (ABT)				T/F LV (ABT)				GT (ABT)			
		No.	TGT	COM	BAL	No.	TGT	COM	BAL	No.	TGT	COM	BAL
1	Amravati	13	13	0	13	102	204	172	32	2	4	4	0
2	Aurangabad	6	6	4	2	140	280	244	36	10	20	18	2
3	Karad	4	4	0	4	108	216	205	11*	13	26	4	22
4	Nagpur	57	57	27	30	148	296	274	22	18	36	36	0
5	Nasik	30	30	8	22	190	380	345	35*	11	22	10	12
6	Pune	10	10	2	8	149	298	264	34	2	4	2	0
7	Vashi	67	67	32	35	133	266	252	14	31	62	20	42
	Total	**187**	**187**	**73**	**114**	**970**	**1940**	**1756**	**184**	**87**	**174**	**94**	**78**

**Only main meters installed*

The Commission also directed MSETCL to meter interfaces of inter utility transaction points like TATA, REL, and BEST within Mumbai area. The total number of inter-utility interface locations to be metered at TPC/REL/BEST is 566. Although installation of meters at most of these locations is complete only 69 meters could be commissioned till date as outages at locations of TPC/BEST could not be made available.

Table 3-3 Status of Meters Installed for Utility-Interface Locations

Target	Phase-II					Phase-I				otal
Time						Interstate & Licensee				
							Licensee			
	MSETCL	TATA	RELIANCE	BEST	TOTAL Ph II	Interstate	TATA	MSEDCL (Mula Pravara)	Total Ph. I	
Interface Locations	1244	492	60	14	1810	19	43	34	96	1906
Interface locations installed	1208	492	60	0	1760	19	43	34	96	1856
Interface locations commissioned	999	9	60	0	1068	19	43	34	96	1164
Balance Interface locations	245	483	0	14	742	0	0	0	0	742
Energy accounting possible through other meters out of above 742 meters	126	0	0	0	126	0	0	0	0	126

Further, depending upon the availability of material and outages it is proposed to install and commission the balance meters as follows

Table 3-4 Action Plan for Balance Metering

Target Time	Phase-II					Phase-I				Grand Total Ph. I+II
						Interstate & Licensee				
							Licensee			
	MSETCL	TATA	RELIANCE	BEST	TOTAL Ph II	Interstate	TATA	MSEDCL (Mula Pravara)	Total Ph. I	
Dec-08	90	200	0	14	304	0	0	0	0	304
Jan-09	90	150	0	0	240	0	0	0	0	240
Feb-09	65	133	0	0	198	0	0	0	0	198
Total	**245**	**483**	**0**	**14**	**742**	**0**	**0**	**0**	**0**	**742**

"

Further, in response to the Commission's query, MSETCL submitted that interface locations to be metered over intra-State transmission network are updated from 1906 to 1931. Out of these 1931 locations, at 1357 locations, metering has been commissioned. Energy accounting through these 1357 meters is possible after commissioning of communication links to SLDC, Kalwa. Out of balance 574 metering locations, 469 locations belong to TPC and 14 locations belong to BEST. Only remaining 91 locations are within MSETCL network. The progress of interface metering is being continuously reviewed by MSETCL and the Commission has been regularly updated on progress during co-ordination meetings held from time to time between MSETCL, officials of other Utilities and the Commission's officials. Further, during the Public Hearing conducted on March 23, 2009, MSETCL submitted that the entire interface metering over Intra-State transmission system shall be completed by end April/May 2009.

In this context, the Commission observes that despite repeated directives through Intra-State ABT Order, MYT Order and APR Order and repeated extension of timelines from time to time, MSETCL and the transmission licensees have failed to accomplish interface metering (G< >T and T< >D) over the intra-State transmission system. The Commission has directed all transmission licensees to facilitate and co-operate with MSETCL to ensure that requisite special energy meters are put in place across all the interface points at the earliest without any further delay. The energy accounting and accurate ascertainment of transmission losses for intra-State transmission system as well as for various components/elements of the transmission system would be feasible only after establishment of such metering arrangement.

<u>Transmission Loss assessment for FY 2008-09 and projection for FY 2009-10:</u>

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

> *"MSETCL would like to submit to the Honourable Commission 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 3-5 Transmission Loss of Intra-State Trans. System

SR. NO.	MONTH	2006-07		2007-08		2008-09	
		HVAC (%)	HVDC (%)	HVAC (%)	HVDC (%)	HVAC (%)	HVDC (%)
1	APR			4.47	3.9	4.93	4
2	MAY			5.1	4.05	5.69	3.707
3	JUN			4.07	4.1	4.63	3.71
4	JUL			3.15	3.88	4.33	3.63
5	AUG			3.83	3.71	3.81	3.93
6	SEP			4.31	3.62	4.85	3.48
7	OCT	5.28	3.53	4.64	3.85		
8	NOV	5.28	3.55	5.63	3.75		
9	DEC	5.47	3.57	4.99	3.88		
10	JAN	5.32	3.52	5.45	3.93		
11	FEB	4.82	3.82	4.93	3.98		
12	MAR	5.3	4.04	5.07	3.98		
13	**ANNUAL**	**5.94**	**3.585**	**4.67**	**3.89**		

MSETCL, thus hereby submits no revision in the transmission losses projected by the Commission. Therefore the projected transmission loss for MSETCL system is as tabulated below.

Table 3-6 Transmission Loss Projection of MSETCL System in Control Period

FY 2008-09	FY 2009-10
4.85%	4.85%

In this context, the Commission sought the following clarifications on MSETCL's submission on transmission loss as under:

"...

1. *MSETCL has projected transmission loss for its system as a constant figure of 4.85% for FY 2007-08 through FY 2009-10. MSETCL, under its Petition at Para 3.1.1, has also submitted that accurate assessment of transmission loss is impossible without full fledged implementation of ABT metering. However, MSETCL under para 3.1.1 has indicated annual transmission loss for HVAC system as 4.67% and that for HVDC system as 3.89% during FY 2007-08, which has improved from transmission loss level of 5.94% for HVAC and 3.58% for HVDC during FY 2006-07. Further, MSETCL under its Petition as per Table 3-4 and Table 3-5 has confirmed that balance ABT metering shall also be commissioned by Feb 2009. Thus, for FY 2009-10, it would be possible to undertake accurate assessment of the transmission loss. Hence, MSETCL should*
    a. *Come up with a realistic projection of transmission loss for FY 2008-09 and FY 2009-10 by projecting appropriate improvement in loss levels for the MSETCL system over the period.*
    b. *Submit Form F11 (Transmission Loss) duly filled as part of the submission of APR formats."*

In response to above queries, MSETCL filed its response as under:

"With the implementation of complete ABT metering, MSETCL can only accurately assess the losses taken place in the system. However, it is not possible to project losses for FY 2009-10 with the help of ABT metering. Losses are function of load, power flow and system capacity. Therefore, it changes with system conditions. Any further improvement in the system loss status is not expected due to:

- *Steep increase in demand*

- *No proportional rise in generation*
- *Above conditions make heavy imports of power leading to increase in system losses. To improve further transmission losses, the overloaded lines and low voltage pockets are identified and the schemes are prepared for corrective action.*

Thus, MSETCL is taking efforts to keep the transmission losses under control by further improving the transmission corridor and installation of capacitor for power factor improvement. The present system loss for the State in FY 2008-09 (upto Dec 2008) was 4.85% as per SLDC."

In this context, the Commission observes that transmission loss is one of the critical performance parameter 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 urges MSETCL and all transmission utilities 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 3.15% to 5.63%, with an average value of 4.67% for FY 2007-08, and have ranged between 3.84% to 5.69%, with an average value of 4.87% for FY 2008-09 (based on assessment upto February 2009). It is observed that the quantum of energy input has increase by around 1.6% during this period, which could be one of the reasons for the increase in transmission losses. It is expected that the same trend of energy input will continue to prevail during FY 2009-10, given the continued load shedding in the State. 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. Moreover, FY 2009-10 is the last year of the first Control Period. Hence, transmission loss for InSTS for FY 2009-10 has been considered as 4.85% by the Commission.

4.2 CONTROL PERIOD

The first Control Period for Multi-Year Tariff (MYT) has been stipulated as April 1, 2007 to March 31, 2010 in the MYT Order.

4.3 PROVISIONAL TRUING-UP FOR FY 2008-09

MSETCL, in its APR Petition for FY 2008-09 and ARR Petition for FY 2009-10, submitted the performance for FY 2008-09 based on actual performance for the first half of the year, i.e., April to September 2008, and estimated performance for the second half of the year, i.e., October 2008 to March 2009. MSETCL submitted the comparison of each element of expenditure - with that approved by the Commission in its Order dated May 31, 2008 on MSETCL's APR Petition for FY 2007-08.

The Commission will undertake the final truing up of the revenue requirement and revenue for FY 2008-09 once the audited accounts of MSETCL for FY 2008-09 are available, i.e., during Annual Performance Review for the third year of the Control Period, viz., FY 2009-10. However, the Commission in this Order on APR for FY 2008-09 and determination of revenue requirement for FY 2009-10 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 2008-09 and FY 2009-10 as compared to the Commission's APR Order and MYT Order, 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 2008-09, the revised expenses approved for FY 2008-09 in this Order under the provisional truing up exercise will be considered as base expenses.

4.4 O&M EXPENSES FOR FY 2008-09 AND FY 2009-10

In the MYT Order, the Commission had observed as under:

> *"The Commission is of the opinion that any other suitable norms for allowance of O&M expenses could be adopted after undertaking a thorough study of the O&M expenditure, the cost drivers of the same, and the comparison of the per bay and per circuit km norms across different transmission Utilities, through a separate process. Till any such norm for O&M expenditure is determined, the Commission is considering the individual elements of O&M expenditure based on the increase linked to inflation indices for the first Control Period of MYT."*

Since the norms have yet to be established through a separate study, the Commission has continued with the approach of considering each of the heads of O&M expenditure, viz., employee expenditure, A&G expenditure and R&M expenditure, separately, keeping in view the targets specified in APR and MYT Orders.

Relevance of Multi-Year Tariff

In this context, the Commission observes that during the public regulatory process on the APR Petitions, several consumers have expressed their opinion that revising tariff on an annual basis is against the principles of MYT. While this is not incorrect if one goes by the pure concept of MYT, in Maharashtra, parameters like sales and power purchase have not been stipulated in the MYT Orders, due to the uncertainty on account of the prevailing supply shortages in the State and the respective licence area. Consequently, the tariff has been specified for only one year, rather than the Control Period, which is also in accordance with the MERC Tariff Regulations, which specifies that tariff, will be determined annually.

Consequently, in the MYT Orders, the Commission has primarily stipulated the following parameters separately for each year of the Control Period, viz.,

(a) Performance trajectory

i. Station Heat Rate (SHR), auxiliary consumption, transit losses and secondary oil consumption for Generating Companies;

ii. Availability for Transmission Licensees; and

iii. Distribution loss for Distribution Licensees

(b) Cost elements

i. Operation & Maintenance (O&M) expenses have been approved as a whole for Generating Companies, and for individual elements, viz., employee expenses, A&G expenses, and R&M expenses, for Transmission Licensees and Distribution Licensees

ii. Working capital interest

However, even though the O&M expenses have been approved by the Commission for each year of the Control Period, wherein, by and large, the Utility's projections have been accepted, most Utilities have projected significant further annual increase in the O&M expenses for each year in the Control Period. If this increase in O&M expenses is allowed as sought by the Utilities, then the MYT framework created by the Commission in its MYT Orders will have no sanctity. Hence, the Commission rules that for FY 2008-09 and FY 2009-10, the O&M expenses allowed by the Commission for FY 2007-08 under the final truing up for FY 2007-08, after considering the base as audited expenses for FY 2006-07, will be considered as the base, except for pure uncontrollable elements such as increase in employee expenses due to change in accounting standards and increase will be allowed strictly as per the CPI/WPI growth as applicable, which incidentally, is higher than the growth rate projected by the Utilities in their respective original Petitions. The variation between allowed expenses and actual expenses will be considered as a controllable gain/loss, and will be shared between the Utilities and the respective consumers, in accordance with Regulation 19 of the MERC Tariff Regulations.

4.4.1 Employee Expenses

The Commission had allowed net employee expenses of Rs. 347.22 Crore for FY 2008-09 in its APR Order and Rs. 315.63 Crore for FY 2009-10 in its MYT Order. MSETCL submitted that it has projected the revised employee expense for FY 2008-09 and FY 2009-10 based on actual audited expenses of FY 2007-08, with the increase of 6.26% as determined by the Commission. MSETCL submitted that Dearness Allowance has been projected as per the recent hike in the rates. MSECTL submitted that in addition, it has added an amount of Rs. 23.27 Crore each in FY 2008-09 and FY 2009-10, towards the amortisation of provisioning for leave encashment for FY 2006-07. MSETCL submitted that the proposed amortisation of leave encashment provisioning was over and above the estimates using actuals for FY 2007-08. MSETCL submitted that the impact of Rs. 3.38 Crore due to creation of new posts during FY 2008-09 for Projects Division, and Rs. 3.59 Crore in FY 2009-10 have been capitalised.

In reply to the Commission's query, MSETCL submitted that it has made an ad-hoc provisioning on account of 'effect of pay revision' under employee expense for FY 2008-09 as Rs. 79.17 Crore and Rs. 84.13 Crore for FY 2009-10. Accordingly, MSETCL has projected net employee expenditure of Rs 402.01 Crore during FY 2008-09 and Rs 540.40 Crore during FY 2009-10.

For FY 2008-09, for each sub-head of employee expenditure, the Commission has considered an increase of around 7.31% on account of inflation over the revised level of employee expenses as approved for FY 2007-08 under the truing up exercise in this Order, based on the increase in Consumer Price Index (CPI). 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 3 years, i.e., FY 2006-07 to FY 2008-09 (upto December 2008) (numbers as on December 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 for FY 2008-09 and FY 2009-10 individually. The capitalisation of employee expenses has been considered at the rate of 20% of the gross employee expense in accordance with MSETCL's projections. The Commission has not considered the effect of pay revision as the exact impact is not known. Further, the Commission has also not considered the impact of additional employees on account of creation of new posts for Project Division and other Divisions, since only posts have been created and the posts have not been filled by actual employees. Fringe Benefit Tax has also been included under gross employee expense. The Commission will undertake the final truing up of employee expenses for FY 2008-09 based on actual employee expenses for the entire year and prudence check, during the APR process for FY 2009-10.

For FY 2009-10, for each sub-head of employee expenditure, the Commission has considered an increase of around 7.31% on account of inflation over the revised level of employee expenses as approved for FY 2008-09 under the provisional truing up exercise in this Order, based on the increase in Consumer Price Index (CPI). However, for certain expense heads, such as earned leave encashment and provision for leave encashment, MSETCL's revised estimates have been considered, since these are linked to AS-15 treatment. Provisioning of Rs. 23.27 Crore has been added to the provisioning for earned leave encashment for that year as projected by MSETCL. The capitalisation of employee expenses has been considered at the rate of 20% in accordance with MSETCL's projections. Further, gross employee expense is inclusive of Fringe Benefit Tax.

Accordingly, the approved employee expenses for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: Employee Expenses for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSETCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSETCL	Approved
Gross employee expenses	396.75	391.34	368.81	394.53	446.50	395.77
Add: Provision of Leave Encashment to be amortised over 5 year period starting from FY 2006-07	37.27	23.27	23.27		23.27	23.27
Add: Effect of creation of new posts and effect of pay revision	0.00	84.88	0.00		182.34	0.00
Less: Capitalisation	(86.81)	(97.48)	(73.76)	(78.91)	(109.72)	(79.15)
Net employee expenses	**347.22**	**402.01**	**318.32**	**315.62**	**542.40**	**339.89**

4.4.2 A&G Expenses

The Commission had allowed net A&G expenses of Rs. 45.54 Crore for FY 2008-09 in its APR Order and Rs. 28.26 Crore for FY 2009-10 in its MYT Order.

MSETCL in its Petition submitted that it has considered the inflation rate as 5.29% for estimating A&G expenses for FY 2008-09 over actuals of FY 2007-08. Further, estimates for FY 2009-10 are based on escalation rate of 5.29% over FY 2008-09 estimates. In addition to the above, MSETCL has considered lease rent payable to MSEB Holding Company as Rs 9.53 Crore for FY 2008-09 and FY 2009-10.

In reply to the Commission's query, MSETCL submitted the trend of A&G expenditure in first half and second half of the last three financial years (viz., FY 2005-06, FY 2006-07 and FY 2007-08)

For FY 2008-09, the Commission has considered an increase of around 6.04% on account of inflation over the gross A&G expenses for FY 2007-08 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 3 years, i.e., FY 2006-07 to FY 2008-09 (upto December 2008), 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. In addition to application of escalation rate over the Commission approved figures, the lease rent payable to MSEB Holding Company has been considered at Rs. 9.53 Crore as submitted by MSETCL. The Commission will undertake the final truing up of A&G expenses for FY 2008-09 based on actual A&G expenses for the entire year and prudence check, during the APR process for FY 2009-10. The capitalisation of A&G expenses has been considered at the rate of 15% in accordance with MSETCL's projections.

For FY 2009-10, for each sub-head of A&G expenditure, the Commission has considered an increase of around 6.04% on account of inflation over the revised level of A&G expenses as approved for FY 2008-09 under the provisional truing up exercise in this Order, based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). In addition to application of escalation rate over the Commission approved figures, the Commission has considered an amount of Rs. 9.53 Crore towards lease rent payable to MSEB Holding Company by MSETCL for FY 2009-10 for the reasons as stated above. The capitalisation of A&G expenses has been considered at the rate of 15% in accordance with MSETCL's projections.

Accordingly, the approved A&G expenses for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: A&G Expenses for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Approved after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Gross A&G Expense	53.57	80.56	53.91	33.24	84.34	57.17
Add: Lease Rent payable by MSETCL to MSEB Holding Company	0.00	0.00	9.53	0.00	0.00	9.53
Less: Capitalisation	(8.04)	(15.48)	(9.52)	(4.99)	(16.23)	(10.00)
Net employee expenses	**45.54**	**65.07**	**53.92**	**28.26**	**68.11**	**56.69**

Further, as regards appointment of consultants, the Commission directs MSETCL that in future, any appointment of consultants where the estimated cost for the engagement of the Consultants is more than Rs. 1 crore, it should ensure that the selection is made through a competitive bidding process, proper Terms of Reference are prepared, cost benefit analysis is stated upfront and the deliverables of the consultancy assignment are properly defined. MSETCL should submit the following details for all consultancy assignments of more than Rs 1 Crore in its APR and Tariff Petition:

- Process followed for appointment of Consultant including number of bids received along with bid documents
- Stated Cost-Benefit analysis and assessment of cost benefit analysis after completion of the assignment
- List of Deliverables submitted by Consultant

4.4.3 R&M expenses

The Commission had allowed net R&M expenses of Rs. 173.97 Crore for FY 2008-09 in its APR Order and Rs. 95.01 Crore for FY 2009-10 in its MYT Order. MSETCL has projected net R&M expense as Rs. 309.77 Crore and Rs. 360.01 Crore for FY 2008-09 and FY 2009-10, respectively.

MSETCL in its Petition submitted that estimates for R&M expense for FY 2008-09 and FY 2009-10 are based on actuals for FY 2007-08 and circle-wise estimates of need for R&M expense. Further, MSETCL also submitted expected benefits for R&M of some major items like repairs of transformers, overhauling and retrofitting of breakers, etc., and stated the objective of the R&M expenditure as to maintain breakers/transformers/protection system in healthy and good working condition. Expected benefits or improvement in operational performance have been stated as improvement in availability, smooth operation, reduced outage period, etc. The Commission observes that while MSETCL has highlighted R&M expenditure towards few major schemes (total 29 schemes) as Rs 145.30 Crore for FY 2008-09 and Rs 167 Crore for FY 2009-10, it includes two schemes, namely, repairs of breakers/overhauling and retrofitting (Rs 14.98 Crore for FY 2008-09 and Rs 17.23 Crore for FY 2009-10) and Repairs of transformers/replacement of failed transformers/testing of transformer oil (Rs 27.64 Crore for FY 2008-09 and Rs 31.79 Crore for FY 2009-10), which are in the nature of capital expenditure schemes, rather than Repair & Maintenance expenses.

The Commission enquired regarding the procurement practices followed by MSETCL and whether the equipments were procured at minimum costs without comprising on the quality specifications, in the context of R&M expenses under FY 2008-09 and FY 2009-10. MSETCL submitted a note on the practices adopted by its Central Purchase Agency.

For FY 2008-09, for each sub-head of R&M expenditure, the Commission has considered an increase of around 5.19% on account of inflation over the revised level of R&M expenses as approved for FY 2007-08 under the truing up exercise 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 3 years, i.e., FY 2006-07 to FY 2008-09 (upto December 2008), to smoothen the inflation curve. The Commission will undertake the final truing up of R&M expenses for FY 2008-09 based on actual R&M expenses for the entire year and prudence check, during the APR process for FY 2009-10.

For FY 2009-10, for each sub-head of R&M expenditure, the Commission has considered an increase of around 5.19% on account of inflation over the revised level of R&M expenses as approved for FY 2008-09 under the provisional truing up exercise in this Order, based on the increase in Wholesale Price Index (WPI), as detailed above. Accordingly, the approved R&M expenses for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: R&M Expenses for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Approved after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Net R&M expenses	**173.97**	**309.77**	**173.93**	**95.01**	**360.01**	**182.96**

4.4.4 O&M expenses

The total O&M expenses approved by the Commission for FY 2008-09 and FY 2009-10 is summarised in the following Table:

Table: O&M Expenses for FY 2008-09 & FY 2009-10 (Rs. Crore)

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Approved after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Net employee expenses	347.22	402.01	318.32	315.62	542.40	339.89
Net A&G expenses	45.54	65.07	53.92	28.26	68.11	56.69
Net R&M expenses	173.97	309.77	173.93	95.01	360.01	182.96
Total	**566.72**	**776.85**	**546.18**	**438.88**	**970.52**	**579.54**

4.5 CAPITAL EXPENDITURE AND CAPITALISATION

Capital expenditure and capitalisation are two important variables that influence computation of various critical parameters such as depreciation, advance against depreciation, interest on long term debt and return on equity. Accordingly, variation in capital expenditure and capitalisation over the Control Period needs to be evaluated carefully during annual performance review along with scrutiny of reasons necessitating such review.

The Commission, in the APR Order had approved capital expenditure of Rs. 930 Crore for FY 2008-09, and in its MYT Order, the Commission had approved capital expenditure of Rs 262 Crore for FY 2009-10. Against this, MSETCL projected capital expenditure of Rs 2400 Crore for FY 2008-09 and Rs 4847 Crore for FY 2009-10. In the APR Order, the Commission approved capitalisation of Rs 1029.65 Crore for FY 2008-09 and Rs 808.55 Crore for FY 2009-10, in its MYT Order. Against this, MSETCL has projected capitalisation of Rs 1046.86 Crore for FY 2008-09 and Rs 2879.34 Crore for FY 2009-10 as shown in the Table below:

Table: Capital Expenditure and Capitalisation for FY 2008-09 & FY 2009-10 (Rs. Crore)

Particulars	**FY 2008-09**		**FY 2009-10**	
	APR Order	**Revised Estimate by MSETCL**	**MYT Order**	**Revised Estimate by MSETCL**
Capital Expenditure	**930.00**	**2400.00**	**262.33**	**4847.00**
a) on DPR Schemes	858.56	1196.78	222.87	1761.09
b) on Non-DPR Schemes	171.09	1203.22	39.46	3085.91
Total Capitalisation	**1029.65**	**1184.92**	**808.55**	**2879.34**

The Commission, in the APR Order for FY 2007-08, approved capital expenditure and capitalisation of Rs 930 Crore and Rs 1029.65 Crore, respectively for FY 2008-09.

MSETCL in its present Petition submitted scheme-wise details of capital expenditure, clubbed into different categories, mainly ancillary schemes, evacuation schemes, transformer addition schemes, transformer replacement schemes, etc., for FY 2008-09 and FY 2009-10. Further, MSETCL has submitted zone-wise estimates of capital expenditure as shown below:

Table: Zone-wise Capital Expenditure for FY 2008-09 and FY 2009-10 (Rs. Crore)

Zone	**Revised Estimates for FY 2008-09**	**Budget Estimates for FY 2009-10**
Vashi	510	407
Pune	430	605
Karad	310	661
Nasik	280	651
Aurangabad	340	715
Amaravati	289	491
Nagpur	211	915
Others	30	402
Total	**2400**	**4847**

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 Cr, as depicted under the following Table:

(**Rs Crore)**

	FY 2008-09		FY 2009-10	
Particulars	Capital Expenditure	Capitalisation	Capital Expenditure	Capitalisation
Approved DPR Schemes	1127.05	320.14	1016.41	1054.49
DPR schemes submitted but under consideration	69.73	0	744.68	225.78
Non-DPR Schemes > Rs. 10 Crore	469.54	222.73	1419.91	723.54
Non-DPR Schemes <= Rs. 10 Crore	733.68	642.05	1666	875.53
Total	2400	1184.92	4847	2879.34

It is evident from the above Table that out of projected total capitalisation of Rs 1184.92 Crore for FY 2008-09 by MSETCL, capitalisation of Non-DPR schemes amounted to Rs 864.78 Crore comprising Non-DPR schemes with capital outlay exceeding Rs 10 Cr (Rs

222.73 Cr) and Non-DPR schemes with capital outlay below Rs 10 Cr (Rs 642.05 Cr). Further, out of projected total capitalisation of Rs 2879.34 Crore for FY 2009-10 by MSETCL, capitalisation of Non-DPR schemes amounted to Rs 1599.07 Crore comprising Non-DPR schemes with capital outlay exceeding Rs 10 Cr (Rs 723.54 Cr) and Non-DPR schemes with capital outlay below Rs 10 Cr (Rs 875.53 Cr). MSETCL has claimed that all such Non-DPR schemes were initiated during the MSEB period, prior to corporatisation (June 2005). In this context, it is worthwhile to refer to MSETCL's submission as regards 'Ongoing Schemes' under MYT Order in Case No. 67 of 2006 dated April 2, 2007, as under:

MSETCL Submission:

Non-DPR Schemes – Capital Expenditure

Scheme Description	***Non-DPR Schemes (Rs Crore)***			
	FY 2007-08	***FY 2008-09***	***FY 2009-10***	***TOTAL***
Ongoing schemes	*34.92*	*8.95*	*2.00*	***45.87***
New schemes	*144.52*	*148.63*	*69.92*	***363.07***
Augmentation schemes	*19.25*	*23.75*	*5.00*	***48.00***
ORC schemes	*9.95*	*0.00*	*0.00*	***9.95***
R&M schemes	*63.65*	*14.56*	*2.00*	***80.21***
TOTAL	***272.28***	***195.89***	***78.92***	***547.09***

Thus, it is evident that total capital expenditure towards Non-DPR schemes as proposed by MSETCL amounted to only Rs 195.89 Crore and only Rs 78.92 Crore during FY 2008-09 and FY 2009-10, respectively. Further, out of projected non-DPR schemes, on-going schemes amounted to only Rs 8.95 Crore during FY 2008-09 and Rs 2.00 Crore during FY 2009-10. However, MSETCL in its recent submission is now claiming Non-DPR related capital expenditure of Rs 1203. 22 Crore during FY 2008-09 and Rs 3085.91 Crore during FY 2009-10, 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 2008-09, i.e., over four years after obtaining the approval of 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.

In this regard, the Commission in its APR Order for Maharashtra State Electricity Transmission Company Limited (MSETCL) for FY 2007-08 as well as the MYT Orders for Utilities had observed as under:

> *"However, the Commission would like to reiterate that in-principle approval of the scheme does not absolve the senior management of MSETCL of their responsibility to prioritise various schemes and undertake cost benefit analysis and financial analysis to validate the commercial prudence of each scheme. MSETCL should ensure that the projected benefits actually accrue for the benefit of the stakeholders. It would be essential to monitor progress of each scheme as well as track expenditure and benefits accrued as per the scheme."*
>
> …
>
> *"The increase in quantum of Non-DPR schemes indicates an unhealthy trend, as the Commission feels that there is a tendency to split distribution scheme so that capital outlay of the scheme is below Rs. 10 Crore, to escape regulatory scrutiny. The Commission will take a review of the schemes being classified under Non-DPR category, and in case it is found that these schemes should have ideally been classified under DPR category, then that capex and the related capital charges will be disallowed till the DPR is submitted and the scheme is approved by the Commission."*

Further, in this context the Commission observes that the revision in ARR/tariff sought by different Utilities as a part of the Annual Performance Review (APR) process for FY 2008-09 can be attributed primarily to increase in power purchase cost of distribution licensees and the steep increase in capital expenditure and capitalisation being undertaken by the Utilities in recent years. The issue of increase in power purchase expenses is being dealt with in the Orders of the respective distribution licensees, since the reasons for the increase are different for different distribution licensees. However, the issue of steep increase in capital expenditure and capitalisation is a generic issue and relevant for all the Utilities.

While the Commission appreciates that the investment on capex schemes is an ongoing process for any Utility/Licensee. It is required for healthy system development with tangible and intangible benefits. The scope, objective and benefits are identified while formulating project reports. After implementation of the scheme, before capitalisation, the benefits are to be demonstrated by the Utility. Utility is required to execute the capex schemes in a phased manner so as to minimise tariff shock attributable to capex implementation. The Commission can permit capex in ARR only after prudence check as there is an impact on tariff.

To understand the significance of the capitalisation claimed by MSETCL, the actual capitalisation over the last four to five years vis-à-vis the opening GFA prevailing around 5 years ago have been compiled as under:

(Rs Crore)

	FY 2004-05	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10
Particulars	**Actuals**	**Actuals**	**Actuals**	**Actuals-Petitioner submission**	**Revised Estimate**	**Projected**
Opening GFA						
MSPGCL	9319.00	9437.00	9641.99	9996.20	10120.59	10382.33
MSETCL	8060.28	8322.37	8632.69	8965.25	9831.27	11016.16
MSEDCL	8384.00	8894.00	9428.00	10530.80	11806.83	14444.80
Total	25763.28	26653.37	27702.68	29492.25	31758.69	35843.29
Asset addition during the year						
MSPGCL	118.00	204.99	343.39	152.55	261.74	836.62
MSETCL	262.34	310.41	332.59	867.14	1184.92	2879.34
MSEDCL	510.00	534.00	942.78	1278.54	2649.97	5479.47
Total	890.34	1049.40	1618.76	2298.23	4096.63	9195.44
Asset write off/retirement during the year						
MSPGCL	0.00	0.00	-0.07	-28.33	0.00	0.00
MSETCL	-0.25	-0.09	-0.68	-1.12	-0.03	0.00
MSEDCL	0.00	0.00	-0.27	-2.51	-12.00	-13.00
Total	-0.25	-0.09	-1.02	-31.96	-12.03	-13.00
Closing GFA						
MSPGCL	9437.00	9641.99	9985.31	10120.59	10382.33	11218.95
MSETCL	8322.37	8632.69	8964.60	9831.27	11016.16	13895.51
MSEDCL	8894.00	9428.00	10370.51	11806.83	14444.80	19911.27
Total	26653.37	27702.68	29320.42	31758.69	35843.29	45025.73

Note: Figures taken from Audited A/c or respective Tariff Orders or ARR Petition of Utilities as available

The above compilation has been done for MSEB as a whole, to give a better picture of the overall increase in asset addition over the last five years, since MSEB was earlier being regulated as an integrated Utility.

It is clear from the above Table that the Gross Fixed Assets have increased by around 19%, 67%, and 124% for the Generation, Transmission, and Distribution Business, respectively, over the last five years. The pace of asset addition has increased by leaps and bounds over the last five years. MSEDCL has projected to more than double its asset base (as in FY 2004-05) by the end of FY 2009-10, while MSPGCL and MSETCL have also proposed to increase their asset base (as in FY 2004-05) to around 1.2 to 1.7 times. Further, when these Utilities were operating in an integrated manner during the period FY 2004-05 and FY 2005-06, the total asset addition every year was only around Rs. 900 to 1000 Crore, whereas in FY 2008-09 and FY 2009-10, each of the Businesses are individually adding assets of more than this amount every year on an average. The addition to the asset base is clearly not commensurate either with the increase in sales or increase in demand in MW served. Since the Utilities were able to serve the existing consumer base well enough with the existing assets, the rationale for this steep increase in the asset base needs to be examined further. The favourite argument of the Utilities that in the past, there was a backlog on this account and that they want to rake it up is also unconvincing to justify the 100% increase in the asset base in such a short period.

In the regulated business, the returns to the investors are linked to the equity invested in the business, which in turn is directly linked to the existing asset base and assets added every year. The steep increase in the asset base every year has been suggested by the consumers to be an attempt by the Utilities to increase the returns from the regulated business, as has been suggested by the consumers during the Public Hearing conducted by the Commission on the APR Petitions filed by the Utilities.

The Commission has conducted a Public Hearing on the Petitions filed by different Utilities to ascertain the views of the consumers and other stakeholders on the Petition and the tariff increase sought by the Utility. During the Public Hearings, there was a huge resistance to the proposed tariff increase and one of the common objections put forth by the consumers and the public have been that the increase in ARR/tariff being sought by the Utilities is exorbitant and the capital expenditure should not be allowed to the extent sought by the Utilities, since there has not been any noticeable increase in the sales quantum or any significant improvement in some cases deterioration in the service quality over the period.

Further, as regards capital expenditure, the Commission has instituted a process of giving in-principle approval for the capital expenditure schemes costing above Rs. 10 Crore (together known as DPR Schemes), wherein the Utility has to submit Detailed Project Report (DPR) as well as the expected cost-benefit analysis, pay back period, etc., as per well laid out guidelines. Schemes costing less than Rs. 10 Crore are considered as non-DPR schemes and the Utilities are not required to submit any DPR for the approval of the same. It is often observed that at the time of obtaining in-principle approval of the Commission for the DPR schemes, the Utilities indicate several quantifiable benefits and a short payback period. However, the Utilities are not able to substantiate the benefits once the capital investment is actually undertaken and the assets are added to the Gross Fixed Assets (GFA). As a result, the costs and hence, the tariffs are increased, but the expected benefits to the system do not accrue.

In this regard, the in-principle approval given by the Commission to the DPR Schemes has certain standard covenants. One such in-principle approval given to a scheme submitted by MSETCL is reproduced below, for reference:

> "…
>
> *2. Please **note that this in-principle clearance should not be construed as final approval for ARR purpose and the scheme will be open for scrutiny during the tariff determination process/ARR review, particularly in the context of actual cost incurred, scope and objective achieved etc. ex post after implementation of the scheme**. MSETCL will be required to submit the status of implementation of the scheme with cost incurred till date, likely completion date etc. along with their ARR petition or during the tariff determination process at the appropriate time.*

3. MSETCL should submit half yearly report giving the status of implementation of the scheme in terms of expenditure incurred and item wise physical progress achieved during the implementation of the scheme.

4. Assets created after execution of the scheme should be maintained separately in the Asset register.

5. Immediately after completion / commissioning of the respective scheme, MSETCL should communicate to the Commission the date of completion of the scheme, actual cost incurred, escalation in cost, if any with reasons, the scope and objectives of the scheme and to what extent they have been achieved, etc. so as to facilitate a comparison between the in-principle clearance and the actual."(emphasis added)

However, the Utilities have not been able to submit any evidence that the scope and objective of the scheme have been achieved.

In this context, the recent Report by Forum of Regulators on Multi-Year Framework has also emphasized that the capital expenditure plans of Utilities should clearly bring out cost benefit analysis and targeted reduction in technical losses.

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.

Out of proposed capitalisation of Rs 1280.27 Crore towards DPR schemes during FY 2009-10, the Commission has granted in-principle approval for DPR schemes amounting to Rs 1054.49 Crore and remaining DPR schemes are yet to be scrutinised for in-principle approval. Further, as stated earlier, in-principle approval does not absolve senior management of the need to undertake cost-benefit analysis and prioritise the DPR schemes before initiating implementation, and hence, the Commission has considered capitalisation of DPR schemes for FY 2009-10 as Rs. 527.25 Crore, equivalent to 50% of DPR schemes for which in-principle approval has been granted. For capitalisation of non-DPR schemes for FY 2009-10, the Commission has retained the capitalisation of Rs 90.33 Crore as considered in its MYT Order for FY 2009-10. Upon ascertaining the actual cost-benefit analysis of various schemes which have been granted in-principle approval, the Commission shall undertake true-up of capitalisation subject to prudence check during Annual Performance Review for FY 2009-10. For non-DPR schemes, the Commission is retaining the capitalisation for Non-DPR schemes as considered in its MYT Order for FY 2009-10.

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

Table: Capitalisation for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Capitalisation	**1029.65**	**1184.92**	**491.23**	**808.55**	**2879.34**	**617.58**
a) DPR Schemes	858.56	320.14	320.14	718.21	1280.27	527.25
b) Non-DPR Schemes	171.09	864.78	171.09	90.33	1599.07	90.33

4.6 DEPRECIATION

The Commission had permitted depreciation to the extent of Rs 338.77 Crore for FY 2008-09 in its APR Order for FY 2007-08, and Rs 307.04 Crore for FY 2009-10 in its MYT Order, which amounts to 3.48% and 3.12% of Opening level of Gross Fixed Assets (GFA) of MSETCL for FY 2008-09 and FY 2009-10, respectively. The opening GFA was stated at Rs 9728.40 Crore for FY 2008-09 in the APR Order and Rs 9850.69 Crore for FY 2009-10 in the MYT Order. The depreciation rates were considered as prescribed under MERC Tariff Regulations.

Table: Depreciation for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	**FY 2008-09**		**FY 2009-10**	
	APR Order	**Revised Estimate by MSETCL**	**MYT Order**	**Revised Estimate by MSETCL**
Depreciation	338.77	342.61	307.04	383.90
Opening Gross Fixed Assets	9728.40	9831.26	9850.69	11016.15
Depreciation as a % of Opening GFA	3.57%	3.48%	3.12%	3.48%

MSETCL, in its APR Petition, submitted the revised estimate for depreciation for FY 2008-09 and FY 2009-10 as Rs 342.61 Crore and Rs 383.90 Crore, respectively, at an overall depreciation rate of 3.48%, corresponding to opening GFA of Rs 9831.26 Crore and Rs 11016.15 Crore, respectively.

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. In view of revised value of capitalisation as approved under previous paragraphs, the approved depreciation expenditure for FY 2008-09 and FY 2009-10 is summarised in the following table:

Table: Depreciation for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	MYT Order	Revised Estimate by MSETCL	Approved
Depreciation	338.77	342.61	320.74	307.04	383.90	337.86
Opening Gross Fixed Assets	9728.40	9831.27	9209.18	9850.69	11016.16	9700.38
Depreciation as a % of Opening GFA	3.57%	3.48%	3.48%	3.12%	3.48%	3.48%

The Commission will undertake the truing up of Depreciation based on actual capitalisation during the entire year, subject to prudence check, during Performance Review for the third year of Control Period, i.e., FY 2009-10.

4.7 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 235.48 Crore for FY 2008-09 in its APR Order, and Rs 204.79 Crore for FY 2009-10 in the MYT Order. Loan addition of Rs 823.72 Crore and Rs 250.56 Crore was considered for FY 2008-09 and FY 2009-10, respectively, corresponding to 80% of the capitalised asset cost during respective years.

MSETCL, in its APR Petition, submitted the revised estimate of net interest expense for FY 2008-09 and FY 2009-10 as Rs 259.07 Crore and Rs 299.70 Crore, respectively, as summarised in the following Table:

Table: Interest Expense for FY 2008-09 and FY 2009-10 ***(Rs. Crore)***

Particulars	**FY 2008-09**		**FY 2009-10**	
	APR Order	**Revised Estimate by MSETCL**	**MYT Order**	**Revised Estimate by MSETCL**
Loan & Interest				
Op. Balance	2109.13	2486.91	2685.08	3995.20
Additions	823.72	1920.00	250.56	3877.60
Repayments	(379.98)	(411.71)	(424.19)	(455.45)
Cl. Balance	2552.87	3995.20	2511.45	7417.35
Gross Interest Expense	247.44	357.73	271.94	740.88
less SLDC apportionment	(0.95)	(0.95)	(0.95)	(0.95)
less IDC (existing loans)	(11.01)	(58.11)	(66.20)	(86.66)
less IDC (new loans)	0.00	(39.61)	0.00	(353.57)
Net Interest Expense	**235.48**	**259.07**	**204.79**	**299.70**
Over all Interest Rate	10.62%	11.04%	10.47%	12.98%

MSETCL has proposed interest expense corresponding to existing loan comprising 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 13.50% p.a. Further, loans from JBIC have been estimated at 7% 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 proposed to be capitalised during FY 2008-09 and FY 2009-10 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 for the purpose of ARR. 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 2008-09 and FY 2009-10 is summarised in the following Table:

Table: Interest Expense for FY 2008-09 and FY 2009-10 ***(Rs. Crore)***

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Approved after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Loan & Interest						
Op. Balance	2109.13	2486.91	1694.55	2685.08	3995.20	1737.12
Additions	823.72	1920.00	392.98	250.56	3877.60	494.06
Repayments	(379.98)	(411.71)	(350.42)	(424.19)	(455.45)	(365.45)
Cl. Balance	2552.87	3995.20	1737.12	2511.45	7417.35	1865.73
Gross Interest Expense	247.44	357.73	212.41	271.94	740.88	228.67
less SLDC apportionment	(0.95)	(0.95)	(0.95)	(0.95)	(0.95)	(0.95)
less IDC	(11.01)	(97.72)	(41.63)	(66.20)	(440.23)	(78.38)
Net Interest Expense	235.48	259.07	169.83	204.79	299.70	149.34
Over all Interest Rate	10.6%	11.0%	12.4%	10.5%	13.0%	12.7%

4.8 ADVANCE AGAINST DEPRECIATION

MSETCL has sought approval for advance against depreciation for FY 2008-09 and FY 2009-10 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 2008-09 and FY 2009-10 is as under:

Table: Depreciation including AAD for FY 2008-09 and FY 2009-10 (Rs. Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	MYT Order	Revised Estimate by MSETCL	Approved
Depreciation	338.77	342.61	320.74	307.04	383.90	337.86
Loan Repayment	(379.98)	(411.71)	(350.42)	(424.19)	(455.45)	(365.45)
Advance against depreciation (AAD)	**41.20**	**69.10**	**29.68**	**117.15**	**71.55**	**27.59**
Depreciation and AAD	**379.98**	**411.71**	**350.42**	**424.19**	**455.45**	**365.45**

4.9 INTEREST ON WORKING CAPITAL FOR FY 2008-09 AND FY 2009-10

For FY 2008-09 and FY 2009-10, MSETCL estimated the Interest on Working Capital (IWC) considering interest rate @ 12.75% and 13.75% as per the components considered in the MERC Tariff Regulations, with the revised Interest on Working Capital estimated at Rs 65.21 Crore and Rs. 80.57 Crore, respectively, as against Rs 45.69 Crore approved by the Commission in its APR Order for FY 2008-09 and Rs. 37.66 Crore approved by the Commission in its MYT Order for FY 2009-10..

The Commission has estimated the working capital requirement for MSETCL for FY 2008-09 and FY 2009-10, considering the provisional truing up of various expenses. The Tariff Regulations stipulate that 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 revenue requirement for FY 2008-09 was made on November 30, 2007, the Commission has considered the short-term Prime Lending Rate of State Bank of India of 12.75% prevalent at that time for estimating the interest on working capital. For FY 2009-10, since the APR Petition was filed on November 27, 2008, the interest rate of 13.00% has been considered for estimating the working capital interest. The approved interest on working capital for MSETCL for FY 2008-09 and FY 2009-10 is given in the following Table:

Table: Interest on Working Capital for FY 2008-09 & FY 2009-10 ***(Rs Crore)***

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Interest on Working Capital	45.69	65.21	50.20	37.66	80.57	53.19

4.10 OTHER INTEREST AND FINANCE CHARGES FOR FY 2008-09 AND FY 2009-10

In the APR Order for FY 2007-08, 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 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 2007-08 actuals.

For FY 2008-09 and FY 2009-10, the Commission has considered the Guarantee Charges as per revised estimates of MSETCL, which are lower than that approved under APR Order for FY 2008-09; however, guarantee charges are same as that approved for FY 2007-08. 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 2008-09 and FY 2009-10 is given in the following Table:

Table: Other Interest & Finance Charges for FY 2008-09 and FY 2009-10 (Rs Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	MYT Order	Revised Estimate by MSETCL	Approved
Guarantee Charges	27.44	24.76	24.76		24.76	24.76
Finance Charges	4.12	9.60	1.96		19.39	2.47
Total	**31.56**	**34.36**	**26.72**	**21.91**	**44.15**	**27.23**

4.11 OTHER EXPENSES FOR FY 2008-09 AND FY 2009-10

MSETCL submitted that it has considered Other Expenses for FY 2008-09 and FY 2009-10 at Rs. 6.65 Crore and Rs. 20.47 Crore, respectively. The expenditure sub-heads include compensation for injuries, death and damages, sundry expense and material cost variance. In the MYT Order, the Commission had not considered any expense under this head, however, the Commission has considered other expense of Rs 1.38 Crore for FY 2008-09 in the APR Order. The Commission notes that MSETCL has considered an amount of Rs. 19.74 Crore as material cost variance for FY 2008-09 and FY 2009-10 and also considered prior period adjustment of (-13.82 Crore) during FY 2008-09.

The Commission has accepted MSETCL's projection for compensation for injuries, death and damage (Rs 0.16 Cr) and sundry expense (Rs 0.57 Cr) as components of Other Expenses. However, the Commission has disallowed expense on account of material cost variance and prior period adjustments under Other Expenses for FY 2008-09 and FY 2009-10. 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 2008-09 and FY 2009-10 (Rs Crore)

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Other Expenses	1.38	6.65	0.73	0.00	20.47	0.73

4.12 INCOME TAX FOR FY 2008-09 AND FY 2009-10

The Commission had approved income tax of Rs. 31.81 Crore for FY 2008-09 in its APR Order for FY 2007-08 and Rs. 56.27 Crore for FY 2009-10 in its MYT Order. MSETCL, in its present Petition, submitted that for FY 2008-09 and FY 2009-10, the income tax is estimated at Rs 248.20 Crore and Rs. 127.15 Crore, respectively. MSETCL submitted the challans supporting advance income tax payments amounting to Rs. 57.65 Crore for FY 2008-09 till September 2008. Income tax computation submitted by MSETCL is shown in the Table below:

Table: Income Tax for FY 2008-09 and FY 2009-10 (Rs Crore)

Particular	**MSETCL Submission 2008-09**	**MSETCL Submission 2009-10**
REVENUE		
Revenue from Transmission tariff	2,158.74	2,412.83
Other Income	86.59	88.32
Income from Goa wheeling charges	8.90	8.90
TOTAL (A)	**2,254.22**	**2,510.04**
EXPENDITURE		
Employee Costs	402.01	542.40
Administration and General Expenses	65.07	68.11
Repairs and Maintenance	309.77	360.01
Depreciation	382.01	720.62
Advance against Depreciation		
Interest on Long-term Loan Capital	259.07	299.70
Interest on Working Capital	65.21	80.57
Other Interest and Finance Charges	34.36	44.15
Other Expenses	6.65	20.47
Contribution to Contingency Reserves		

Particular	MSETCL Submission	MSETCL Submission
	2008-09	2009-10
TOTAL EXPENDITURE EXCLUDING Income Tax	**1,524.15**	**2,136.02**
Total Expenditure (B)	1,524.15	2,136.02
Surplus / (Deficit) (A - B)	730.07	374.02
Income Tax @ 33.99%	**248.20**	**127.15**

The Commission enquired regarding the reasons for the steep increase in income tax for FY 2008-09 and FY 2009-10. In its reply, MSETCL submitted that it has considered revenue from wheeling charges based on projected cost and RoE. Further, MSETCL submitted that total advance income tax paid for FY 2008-09 till December 2008 was Rs. 79.43 Crore.

The Commission further enquired regarding the basis for considering revenue as the sum of projected expenses and RoE, while computing income tax for FY 2008-09, rather than the actual month-wise revenue earned by MSETCL. The Commission also asked MSETCL to submit details of actual income tax paid till March 2009 along with the supporting documents. In reply, MSETCL submitted that actual advance tax paid by MSETCL for FY 2008-09 in four quarters was Rs. 154.47 Crore. MSETCL further submitted that the total revenue requirement of FY 2009-10 would include the estimated shortfall in revenue in FY 2008-09 (provisional true-up) and other claims pertaining to previous disallowances. The total revenue projected for FY 2009-10 was Rs. 3040.91 Crore.

MSETCL submitted that the Income Tax computation for FY 2009-10 included in its Petition was based on the ARR of Rs. 2510.04 Crore pertaining to that year only. Therefore, MSETCL's projection of Income Tax for FY 2008-09 and FY 2009-10 were made on the basis of ARR of respective financial years. MSETCL added that in the present instance, if the income tax of FY 2008-09 is to be reworked based on actual expected revenue for the year, then the income tax burden for FY 2009-10 also needs to be reworked based on actual expected revenue for FY 2009-10, which will include provisional truing up of FY 2008-09, truing up of FY 2007-08 and other claims pertaining to previous disallowances. This effectively means that the entire ARR of MSETCL for FY 2009-10 needs to be reworked as ARR is also dependent on the income tax payable, which will impact the computation of working capital requirement and corresponding interest.

MSETCL submitted that it has reworked the income tax computation figures based on the above submission. The revised computation shows that the ARR for FY 2009-10 would become Rs. 3085.52 Crore and corresponding income tax payable in FY 2009-10 would be Rs. 354.39 Crore. Accordingly, MSETCL submitted the revised APR formats on April 15, 2009.

The Commission observes that for the purpose of income tax estimation, MSETCL has considered revenue from transmission tariff for FY 2008-09 as Rs 2158.74 Crore equivalent to projected revenue requirement for FY 2008-09. Further, in case income tax for FY 2008-09 as estimated by MSETCL is granted, which presumes revenue for FY 2008-09 equivalent to projected ARR requirement for FY 2008-09, there is no question of revenue gap for FY 2008-09 to be carried forward for provisional true-up in the subsequent year for FY 2009-10.

The actual advance tax paid by MSETCL for FY 2008-09 amounts to Rs 154.47 Crore, as compared to MSETCL's projection of Rs. 248.20 crore in its APR Petition, and the same has been considered for FY 2008-09, under the provisional truing up. For FY 2009-10, in the absence of detailed computation of Income Tax, considering tax depreciation, etc., the Commission has considered the income tax at the same level as actually paid in FY 2008-09, i.e., Rs. 154.47 crore, as compared to MSETCL's projection of Rs. 127.15 crore in its APR Petition. The Commission will true up the income tax, based on actual tax payment by MSETCL for FY 2008-09 and FY 2009-10.

Income Tax as projected by MSETCL in its APR Petition and as approved by the Commission for FY 2008-09 and FY 2009-10 is shown in the Table below:

Table: Income Tax for FY 2008-09 & FY 2009-10 (Rs Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	MYT Order	Revised Estimate by MSETCL	Approved
Income Tax	31.81	248.20	154.47	56.27	127.15	154.47

4.13 CONTRIBUTION TO CONTINGENCY RESERVES FOR FY 2008-09 AND FY 2009-010

MSETCL projected the contribution to contingency reserves for FY 2008-09 and FY 2009-10 at 0.25% of opening GFA, as Rs. 24.58 Crore and Rs. 27.54 Crore, respectively, in accordance with the MERC Tariff Regulations.

In this regard, the MERC Tariff Regulations 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 T rusts Act, 1882 within a period of six months of the close of the financial year."

As discussed in the paragraphs on truing up for FY 2007-08, MSETCL has submitted the documentary evidence of investment of the contingency reserve in the approved securities, as stipulated in the MERC Tariff Regulations.

For FY 2008-09 and FY 2009-10, the Commission has considered the contribution to contingency reserves at 0.25% of opening GFA, after considering the actual capitalisation and revised estimate of capitalisation for these years, as discussed in earlier paragraphs and is shown in the Table below:

Table: Contribution to Contingency Reserve for FY 2008-09 & FY 2009-10 (Rs Crore)

Particulars	FY 2008-09			FY 2009-10		
	APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up	MYT Order	Revised Estimate by MSETCL	Approved
Contribution to Contingency Reserve	24.32	24.58	23.02	49.25	27.54	24.25

4.14 RETURN ON EQUITY (ROE)

The Commission had permitted return on equity to the extent of Rs 422.54 Crore for FY 2008-09 in its APR Order and Rs 427.98 Crore for FY 2009-10 in its MYT 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 2008-09 and FY 2009-10 as Rs 427.60 Crore and Rs 484.50 Crore, respectively, as shown in the Table below:

Table: RoE for FY 2008-09 and FY 2009-10 (Rs Crore)

Particulars	FY 2008-09		FY 2009-10	
	APR Order	Revised Estimate by MSETCL	MYT Order	Revised Estimate by MSETCL
Regulated Equity at beginning of year	2915.18	2935.76	2976.00	3172.75
Equity Portion of Capitalised Expenditure	205.93	236.98	162.00	575.87
Regulated Equity at the end of the year	3121.11	3172.75	3138.00	3748.62
Return on Regulated Equity at beginning of year	408.13	411.01	416.64	444.18
Return on Equity Portion Of Capital Expenditure Capitalised	14.42	16.59	11.34	40.31
Total Return on Regulated Equity	**422.54**	**427.60**	**427.98**	**484.50**

MSETCL submitted that based on the capital expenditure and capitalisation and debt: equity ratio of 80:20, the return on equity on the equity portion has been claimed at 14%. Further, MSETCL has computed RoE on the opening equity as well as on 50% of the equity portion of the capitalisation during the year.

The Commission has computed the RoE for FY 2008-09 and FY 2009-10 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 2008-09 and FY 2009-10 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 2008-09 and FY 2009-10 is summarised in the following Table:

Table: RoE for FY 2008-09 & FY 2009-10 ***(Rs Crore)***

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Regulated Equity at beginning of year	2915.18	2935.76	2764.98	2976.00	3172.75	2863.23
Equity Portion of Capitalised Expenditure	205.93	236.98	98.25	162.00	575.87	123.52
Regulated Equity at the end of the year	3121.11	3172.75	2863.23	3138.00	3748.62	2986.74
Return on Regulated Equity at beginning of year	408.13	411.01	387.10	416.64	444.18	400.85
Return on Equity Portion of Capital Expenditure Capitalised	14.42	16.59	6.88	11.34	40.31	8.65
Total Return on Regulated Equity	**422.54**	**427.60**	**393.97**	**427.98**	**484.50**	**409.50**

4.15 NON TARIFF INCOME FOR FY 2008-09 AND FY 2009-10

MSETCL submitted that the Non-Tariff Income for FY 2008-09 is estimated at Rs 86.59 Crore as against Rs 35.54 Crore approved by the Commission in the APR Order. For FY 2009-10, MSETCL projected a 2% increase in the non-tariff income, to Rs. 88.32 Crore, as compared to Rs. 9.86 Crore considered by the Commission in the MYT Order. MSETCL further submitted that it has factored in the eligible retention of 25% of short term open access charges projected for FY 2008-09 and FY 2009-10.

For FY 2008-09, the Commission has considered the estimates of MSETCL as Rs. 93.58 Crore. However, the Commission has disallowed the proposed retention of 25% of short term open access charges for FY 2008-09 and FY 2009-10, for the reasons elaborated in the sub-section on truing up of non-tariff income for FY 2007-08 in this APR Order.

For FY 2009-10, the Commission has considered the estimates of MSETCL for the sub-heads of interest on other investments, other miscellaneous receipts and income from staff welfare activities. With the increase in open access transactions, the Commission has considered a 20% increase in revenue from short term open access charges over the MSETCL's estimates for FY 2008-09. Accordingly, the non-tariff income for FY 2008-09 and FY 2009-10 estimated by MSETCL and approved by the Commission is given in the Table below:

Table: Non-Tariff Income for FY 2008-09 & FY 2009-10 ***(Rs Crore)***

Particulars	**FY 2008-09**			**FY 2009-10**		
	APR Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**	**MYT Order**	**Revised Estimate by MSETCL**	**Approved**
Gross Non-tariff Income	35.45	93.58	93.58	9.86	95.45	101.32
Less: MSETCL's entitlement from ST Open Access Revenue @ 25% of total ST Open Access Charges received	-	(7.00)	-	-	(7.14)	-
Non-Tariff Income	**35.45**	**86.59**	**93.58**	**9.86**	**88.32**	**101.32**

4.16 AGGREGATE REVENUE REQUIREMENT FOR FY 2008-09 AND FY 2009-10

Based on analysis of each component as discussed above, the Aggregate Revenue Requirement (ARR) of MSETCL for FY 2008-09 and FY 2009-10 as approved by the Commission in its APR Order and MYT Order, respectively, 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 2008-09 (Rs Crore)

Sl.	**Particulars**	**FY 2008-09**		
		APR Order	**Revised Estimate by MSETCL**	**Allowed after provisional truing up**
1	Operation & Maintenance Expenses	566.72	776.85	546.18
1.1	Employee Expenses	347.22	402.01	318.32
1.2	Administration & General Expenses	45.53	65.07	53.92
1.3	Repair & Maintenance Expenses	173.97	309.77	173.93
2	Depreciation, including advance against depreciation	379.97	411.71	350.42
3	Interest on Long-term Loan Capital	235.48	259.07	169.83
4	Interest on Working Capital and on consumer security deposits	45.69	65.21	50.20
5	Other Interest and Finance charges	31.56	34.36	26.72
6	Other Expenses	1.38	6.65	0.73

Sl.	Particulars	FY 2008-09		
		APR Order	Revised Estimate by MSETCL	Allowed after provisional truing up
7	Income Tax	31.81	248.20	154.47
8	Contribution to contingency reserves	24.32	24.58	23.02
10	**Total Revenue Expenditure**	**1,316.93**	**1,826.63**	**1,321.57**
11	Return on Equity Capital	422.54	427.60	393.97
12	**Aggregate Revenue Requirement**	**1,739.47**	**2,254.22**	**1,715.54**
13	Less: Non Tariff Income	35.45	86.59	93.58
14	Less: Income from Other Business	0.00	0.00	0.00
15	Less: Income from Goa Transmission Charges	0.00	8.90	8.90
16	**Aggregate Revenue Requirement from Transmission Tariff**	**1,704.02**	**2,158.74**	**1,613.07**

Based on provisional truing up of various elements for FY 2008-09 as discussed in above paragraphs, the Aggregate Revenue Requirement for FY 2008-09 works out to Rs 1613.07 Crore, as against the amount of Rs 1704.02 Crore approved in the APR Order. This decrease in the Aggregate Revenue Requirement is primarily on account of the decrease in the O&M expenses, depreciation, and interest on long term loans, which has been partly off-set by the increase in the income tax payable. Further, considering actual revenue from transmission tariff during FY 2008-09 as Rs 1811.54 Crore (based on approved monthly revenue from transmission tariff of Rs 128.91 Crore for the 2 months of April and May 2008 and approved monthly revenue from transmission tariff of Rs 155.37 Crore for 10 months from June 2008 to March 2009), the net impact of provisional truing up for FY 2008-09 works out to revenue surplus of Rs. 198.45 Crore. The Commission has considered this revenue surplus of Rs 198.45 Crore during FY 2008-09, along with the revenue gap of Rs. 29.59 crore after final truing up for FY 2007-08 and net incentive of Rs 6.57 Crore for availability for FY 2007-08, while computing the Aggregate Revenue Requirement for FY 2009-10. Accordingly, the Commission approved ARR for FY 2009-10 is shown below in the Table:

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

Sl.	**Particulars**	**FY 2009-10**		
		MYT Order	**Revised Estimate by MSETCL**	**Approved**
1	Operation & Maintenance Expenses	438.88	970.52	579.54
1.1	Employee Expenses	315.62	542.40	339.89
1.2	Administration & General Expenses	28.25	68.11	56.69
1.3	Repair & Maintenance Expenses	95.01	360.01	182.96
2	Depreciation, including advance against depreciation	424.19	455.45	365.45
3	Interest on Long-term Loan Capital	253.87	299.70	149.34
4	Interest on Working Capital and on consumer security deposits	37.66	80.57	53.19
5	Other Interest and Finance charges	21.91	44.15	27.23
6	Other Expenses	0.00	20.47	0.73
7	Income Tax	56.27	127.15	154.47
8	Contribution to contingency reserves	49.25	27.54	24.25
10	**Total Revenue Expenditure**	**1,282.03**	**2,025.55**	**1,354.20**
11	Return on Equity Capital	427.90	484.50	409.50
12	**Aggregate Revenue Requirement**	**1,709.93**	**2,510.04**	**1,763.69**
13	Less: Non Tariff Income	9.86	88.32	101.32
14	Less: Income from Other Business	0.00	0.00	0.00
15	Less: Income from Goa Transmission Charges	0.00	8.90	8.90
16	**Aggregate Revenue Requirement from Transmission Tariff**	**1,700.07**	**2,412.83**	**1,653.48**
17	Add: Incentive on account of Higher Availability for HVAC System FY 2007-08			13.10
18	Less: Reduction in fixed cost recovery due to non-achievement of HVDC normative availability levels in FY 2007-08			(6.53)
19	Add: Revenue Gap upon final Truing up for FY 2007-08		44.97	29.59
20	Add: Revenue Surplus upon Provisional Truing up for FY 2008-09		432.98	(198.45)
21	**Net Aggregate Revenue Requirement for FY 2009-10**		**2,890.78**	**1491.19**

4.17 TRANSMISSION TARIFF FOR FY 2009-10

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 2009-10 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 2009-10. Hence, in this Order, the Commission has only determined the ARR for MSETCL for FY 2009-10 and not determined any transmission tariff for MSETCL. Revenue for MSETCL for FY 2009-10 will be as per the tariff to be determined by the Commission separately under its Order on intra-State transmission pricing framework.

Further, MSETCL has proposed to allocate share of Total Transmission System Cost (TTSC) of intra-State transmission system (InSTS) to each distribution licensee/transmission system users (TSUs) on the basis of yearly average schedule of the SLDC as issued to the said transmission system user for the previous year, instead of average co-incident peak demand method being adopted by the Commission. MSETCL has added that yearly average schedule by SLDC is based on availability and demand for firm power and the same is followed by all distribution licensees. Hence, MSETCL has argued that proposed approach is more pragmatic as it smoothens out generation availability as well as individual load patterns of individual distribution licensees throughout the year.

During the TVS, the Commission observed that yearly average schedule (Ref. Table 23-2, Annexure-8 of Petition) based on firm power allocation for some TSUs, e.g., MSEDCL is around 8672 MW and that for RInfra-D is around 837 MW, whereas as per MSETCL's own submission, average annual co-incident peak demand (Ref. para 3.2.1 of Petition) for MSEDCL is 10487 MW and that for RInfra-D is 1307 MW, whereas Non-Coincident peak demand (Ref. para 3.2.2 of Petition) for MSEDCL is 11441 MW and that for RInfra-D is 1529 MW. Thus, transmission capacity utilisation by such TSUs is far in excess of so called 'yearly average schedule', as proposed by MSETCL. Consequently, the Commission asked MSETCL to submit detailed justification for proposing any change in methodology for allocation of TTSC and sought clarification in respect of following points:

a) Detailed rationale and justification for the proposed methodology
b) Merits of proposed methodology vis-à-vis existing methodology
c) De-merits of proposed methodology vis-à-vis existing methodology
d) Detailed workings and impact assessment on account of proposed change in methodology for transmission service charge payment by each TSU (i.e. distribution licensee)
e) Detailed workings and impact assessment, if any, on account of proposed change in methodology for recovery of transmission service charge by Transmission Licensees.

In response to above queries, while MSETCL did not offer any additional justification, MSETCL submitted the de-merits of existing methodology and merits of proposed methodology as under:

a) In existing methodology, demand share for payment of TTSC comprises total utilisation of TSUs, which includes long term power purchase/allocation, bilateral and infirm power purchase. TSUs also have to pay short-term open access charges separately, over and above TTSC charges. This results in double charging to TSUs.
b) The transmission allocation or utilisation for long-term should be on the basis of long-term power purchase agreement/allocation/schedule. The existing methodology does not clearly reflect above principle.
c) In the existing methodology, the co-incident peak demand of TSUs does not reflect individual peak, as the peak hours of different TSUs are at different time zones.
d) MSETCL believes that considering average final implemented schedule will incentivise Utilities to discipline scheduling and will improve grid operations, whereas existing methodology does not have such impetus.
e) As under proposed methodology, transmission charges shall be in proportion to long-term power procurement based average schedule, which will not include bilateral and infirm transactions, hence, according to MSETCL, this will result in charging of actual generation availability and demand of particular TSUs. Short-term transactions will be accounted for and charged separately, so that there will be no double charging.

In this context, the Commission is of the view that transmission capacity utilisation of the TSUs (distribution licensees in particular) is not entirely dependent on the nature of their power procurement contracts, whether long-term firm or short-term bilateral. Instead, the co-incident peak demand or non-coincident peak demand reflects better measure of their actual transmission capacity utilisation. While sharing of transmission charges based on schedules represents one of the options, under present grid operating conditions of varying frequency, sharing based on co-incident peak demand represents better option for the present Control Period. As far as MSETCL's claim of double charging transmission charges for short-term OA transactions is concerned, the Commission would like to highlight that under the existing methodology, the revenue from short term open access charges shall be used to reduce TTSC for InSTS and shall benefit long term transmission system users, in turn. Further, the Commission would also like to highlight that under both the approaches, the revenue requirement of transmission licensees is fully covered.

Further, the Commission observes that no other transmission licensee or distribution licensee or TSU has commented on the proposal for change in methodology for sharing of TTSC. The Commission believes that any modification to the methodology, particularly relating to Tariff, needs to be undertaken only after extensive consultation process and deliberations, which has not yet taken place. Further, as per Clause 7.1 of the Tariff Policy, it is envisaged that the Central Commission shall formulate Transmission Pricing framework sensitive to distance, direction, quantum of power flow, etc., for regional transmission system and SERCs may implement the same subsequently for intra-State transmission system. Thus, modification to existing Transmission pricing framework can be undertaken upon detailed deliberations and through regulatory process to be initiated for the next Control Period.

Thus, the Commission rules that the existing methodology for Transmission Pricing and sharing of TTSC shall continue.

4.18 APPLICABILITY OF ORDER

This Order for the third year of the first Control Period, i.e., for FY 2009-10, shall come into force with effect from June 1, 2009. The Commission will undertake the Annual Review of MSETCL's performance during the last quarter of FY 2009-10 and determine the revision in revenue requirement for FY 2010-11, if required. MSETCL is directed to submit its Petition for Annual Review of its performance during the first half of FY 2009-10, as well as truing up of revenue and expenses for FY 2008-09 based on audited accounts, with detailed reasons for deviation in performance, latest by November 30, 2009.

The Commission acknowledges the efforts taken by the Consumer Representatives and other individuals and organisations for their valuable contribution to the APR determination process.

Sd/-	Sd/-	Sd/-
(S.B.Kulkarni)	(A. Velayutham)	(V. P. Raja)
Member	Member	Chairman

(P. B. Patil)
Secretary, MERC

APPENDIX 1

List of Persons who attended the Technical Validation Session on January 15, 2009

S.No	Name
MSETCL Officials	
1	Shri P.G. Khandalkar
2	Shri J.D. Tayade
3	Shri U.S. Bhagat
4	Shri A.V. Deshpande
5	Shri V.T. Phrike
6	Shri G.S. Limaye
7	Shri W.R. Aswar
8	Shri S.J. Amberkar
9	Smt Sapna Purohit
10	Shri S.D. Shrouty
11	Shri V.M. Mathoke
12	Shri A.H. Jirange
Others	
13	Shri S.L. Patil
14	Shri A.P. Rewagad
15	Shri K.S. Patil
16	Shri J.M. Bansod
17	Shri Anirban Banarjee
18	Shri Rahul Singh
19	Shri Kashif Nisar Khan
Consultants to Commission	
20	Shri Ajit Pandit
21	Shri M. Palaniappan
22	Shri S.R.Karkhanis
23	Shri M.N. Bapat
24	Shri Anand Kulkarni
25	Shri Krishnajith M U

APPENDIX 2

List of Objectors / Persons participated in Public Hearing held on March 23, 2009

S.No	Name/ Entity
Objectors	
1	The Retail Grain and Dealers Co-operative Society ltd. New Anant Bhuvan, 1st Floor, 257-265, Narsi Natha Street, Mumbai
2	The Tenants of Kalyan Bldgs No. 1&3, 156, Khadilkar Road, R. No. 36, Girgaon, Mumbai
3	Maker Arcade Premises Co-operative Society Ltd., 69, Maker Arcade, 85, Cuffe Parade, Mumbai
4	The Westminster Co-operative Housing Society Ltd., N.S Mankikar Road, Chunabhatti, Sion, Mumbai
5	Kamala Vihar-G Co-op. Housing Society, CTS No.94,97.98, R.No. 140, 141. Village Kandivali, Kandivali (W), Mumbai
MSETCL Officials	
1	Shri A.V. Deshpande
2	Shri P.G. Khandalkar
3	Shri J.D. Tayade
4	Shri V.R. Iyengar
5	Shri S.D. Sone
6	Shri G.S. Limaye
7	Shri M.B. Mohire
8	Shri S.J. Amberkar
9	Smt V.A. Ganu
10	Shri V.T. Phrike
11	Shri Sanjay Sethi
12	Smt Sapna Purohit
Others	

9	Shri U.S. Bhagat
10	Shri A.M. Karvale
11	Shri S.A. Nikalje
12	Shri J.M Bansod
13	Shri V.D. Pande
14	Shri Prashant K Anvekar
15	Shri Rahul M Ranade
Consultants	
16	Shri Ajit Pandit
17	Shri Anand Kulkarni
18	Shri Krishnajith M. U