Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai – 400 005

Email: mercindia@mercindia.org.in

Website: www.mercindia.org.in

Case No. 111 of 2009

IN THE MATTER OF

Maharashtra State Electricity Distribution Company Ltd.'s (MSEDCL) Petition for Truing Up for FY 2008-09, Annual Performance Review for FY 2009-10 and Aggregate Revenue Requirement and Tariff Determination for FY 2010-11

Shri V. P. Raja, Chairman

Shri S. B. Kulkarni, Member

Shri V. L. Sonavane, Member

O R D E R

Dated: September 12, 2010

In accordance with the MERC (Terms and Conditions of Tariff) Regulations, 2005, and upon directions from the Maharashtra Electricity Regulatory Commission (Commission), the Maharashtra State Electricity Distribution Company Limited (MSEDCL), submitted its application for approval of truing up of Aggregate Revenue Requirement (ARR) for FY 2008-09, Annual Performance Review (APR) for FY 2009-10, and Aggregate Revenue Requirement (ARR) and Tariff for FY 2010-11, under 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 MSEDCL, all the objections, responses of the MSEDCL, issues raised during the Public Hearing, and all other relevant material, and after review of Annual Performance for FY 2009-10, determines the ARR and Tariff for MSEDCL for FY 2010-11 as under.

Table of Contents

List of Abbreviations

AAD	Advance Against Depreciation
A&G	Administration and General
APDRP	Accelerated Power Development and Reforms Programme
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
AS	Accounting Standard
ASC	Additional Supply Charge
ATE	Appellate Tribunal for Electricity
BPL	Below Poverty Line
CAGR	Compounded Annual Growth Rate
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
COD	Commercial Operation Date
COS	Cost of Supply
COSIA	Chamber of Small Industries Association
CPI	Consumer Price Index
CPP	Captive Power Plant
Commission/MERC	Maharashtra Electricity Regulatory Commission
Cr	Crore
DA	Dearness Allowance
DSM	Demand Side Management
EA 2003/ Act	Electricity Act, 2003
ESO	Energy Sent Out

FAC	Fuel Adjustment Charge
FPA	Fuel Price Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GoM	Government of Maharashtra
HT	High Tension
HVDS	High Voltage Distribution System
IDC	Interest During Construction
InSTS	Intra-State Transmission System
kVA	Kilo-Volt Ampere
kW	Kilo Watt
kWh	Kilo Watt Hour / Unit
LT	Low Tension
MPECS	Mula Pravara Electric Cooperative Society Limited
MSEB	Maharashtra State Electricity Board
MSEDCL	Maharashtra State Electricity Distribution Company Ltd.
MSETCL	Maharashtra State Electricity Transmission Company Ltd.
MSLDC	Maharashtra State Load Despatch Centre
MSPGCL	Maharashtra State Power Generation Company Limited
MU	Million Units (MkWh)
MGP	Mumbai Grahak Panchayat
MYT	Multi Year Tariff
NCE	Non Conventional Energy
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PF	Power Factor

PGCIL	Power Grid Corporation of India Limited
PPA	Power Purchase Agreement
PWW	Public Water Works
REL	Reliance Energy Limited
RGGVY	Rajeev Gandhi Grameen Vidyutikaran Yojana
RGPPL	Ratnagiri Gas and Power Private Limited
RLC	Regulatory Liability Charge
RLDC	Regional Load Dispatch Centre
RPO	Renewable Purchase Obligation
RPS	Renewable Energy Purchase Specification
RoE	Return on Equity
Rs.	Indian Rupees
SLDC	State Load Despatch Centre
SMD	Simultaneous Maximum Demand
SOP	Standards of Performance
STU	State Transmission Utility
TP	Tariff Policy
TBIA	Thane Belapur Industries Association
T&D	Transmission and Distribution
ToD	Time of Day
TPC	The Tata Power Company Ltd.
TTSC	Total Transmission System Cost
TVS	Technical Validation Session
TSSIA	Thane Small Scale Industries Association
UI	Unscheduled Interchange
VIA	Vidarba Industries Association

VRS	Voluntary Retirement Scheme
WPI	Wholesale Price Index
WRPC	Western Region Power Committee

1 BACKGROUND AND SALIENT FEATURES OF ORDER

1.1 Background

The Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) is a Company formed under the Government of Maharashtra Government 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).

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, to 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.

MSEDCL is in the business of distribution and supply of electricity in the entire State of Maharashtra, except the Mumbai licence area supplied by Brihan-Mumbai Electric Supply & Transport Undertaking (BEST), Reliance Infrastructure Limited (RInfra), and The Tata Power Company Limited (TPC), and the area supplied by Mula Pravara Electric Co-operative Society (MPECS).

1.2 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, on August 26, 2005. These Regulations superseded the MERC (Terms and Conditions of Tariff) Regulations, 2004.

1.3 Commission's Order on MYT Petition for MSEDCL for the Control Period from FY 2007-08 to FY 2009-10

MSEDCL submitted its ARR and Multi Year Tariff (MYT) Petition for the first Control Period from FY 2007-08 to FY 2009-10 on December 29, 2006. The Commission issued the MYT Order for MSEDCL on May 18, 2007 (Operative Order issued on April 27, 2007), which came into effect from May 1, 2007. The Commission determined the tariff for FY 2007-08 through this Tariff Order.

1.4 Commission's Order on MSEDCL's Petition for Annual Performance Review for FY 2007-08 and Determination of Revenue Requirement for FY 2008-09

MSEDCL submitted its Petition for Annual Performance Review for FY 2007-08 and Tariff Determination for FY 2008-09 on November 30, 2007. The Commission issued the Order on the Annual Performance Review for FY 2007-08 and determination of tariff for wheeling of electricity and retail sale of electricity for MSEDCL for FY 2008-09, on June 20, 2008 (Operative Order issued on May 31, 2008), which came into effect from June 1, 2008. As the Annual Performance Review for FY 2007-08 and Tariff determination for FY 2008-09 were under process, the Utilities filed a Petition for continuation of tariff determined for FY 2007-08 beyond March 31, 2008, till the time of issuance of the respective Orders for each Utility. Accordingly, the Commission in its Order issued on April 1, 2008, extended the applicability of the aforesaid Tariff Orders for the Utilities till the revised tariffs are determined for FY 2008-09 under the APR framework and Orders issued thereunder.

1.5 Review Petition on the Commission's APR Order for FY 2007-08 and Tariff determination for FY 2008-09

MSEDCL filed a Petition on affidavit on July 21, 2008 under Regulation 85 of the MERC (Conduct of Business) Regulations, 2004, seeking a review of the aforesaid Order dated June 20, 2008 passed in Case No. 72 of 2007. MSEDCL filed an addendum to the above-mentioned Petition on August 7, 2008, and requested the Commission to include the same in the Review Petition. The Commission, vide its Order dated December 10, 2008 (Case No. 42 of 2008) upheld some of the contentions raised in MSEDCL's Review Petition and clarified that any impact of the same shall be taken into account by the Commission in its Order on MSEDCL's Petition for APR for FY 2008-09 and tariff determination for FY 2009-10. The Commission also permitted MSEDCL to recover Rs. 427 crore, through an Additional Charge, over the four-month period from December 2008 to March 2009.

1.6 Petition for Truing up for FY 2007-08, Annual Performance Review for FY 2008-09 and Tariff determination for FY 2009-10

MSEDCL submitted its Petition for Annual Performance Review for FY 2008-09 and Tariff Determination for FY 2009-10 on December 8, 2008. The Commission issued the Order on the Annual Performance Review for FY 2008-09 and determination of tariff for wheeling of electricity and retail sale of electricity for MSEDCL for FY 2009-10, on August 17, 2009, which came into effect from August 1, 2009.

1.7 Petition for Truing up for FY 2008-09, Annual Performance Review for FY 2009-10 and Tariff determination for FY 2010-11

In accordance with Regulation 9.1 of the MERC Tariff Regulations, an 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 provides that the "*date of receipt of application for the purpose of this Regulation shall be the date of intimation about receipt of a complete application in accordance with Regulation 8.4 above*."

In view of the separate process being undertaken by the Commission for formulation of the MERC MYT Regulations for the Control Period from FY 2011-12 to FY 2015-16, the Commission directed MSEDCL to submit the Petition for truing up for FY 2008-09, APR for FY 2009-10 and Tariff determination for FY 2010-11 latest by December 31, 2009.

MSEDCL submitted its Petition for Annual Performance Review for FY 2009-10 and Tariff Determination of FY 2010-11 on February 18, 2010 based on actual audited expenditure for FY 2008-09, actual expenditure for first half of FY 2009-10, i.e., from April to September 2009 and revised estimated expenses for October 2009 to March

2010, and projections for FY 2010-11. MSEDCL, in its Petition, requested the Commission to:

a) Approve total recovery of ARR of FY 2010-11, Provisional true-up amount of FY 2009-10, the true-up amount of FY 2008-09 and other claims as proposed by MSEDCL through the approved tariff for FY 2010-11.
b) MSEDCL submitted that for last 3-4 years, the same regulatory expert (consultant) is assisting the Commission in analysing tariff /review petitions of MSEDCL. MSEDCL submitted that the Commission may consider changing the regulatory expert and appointing another consultant for this purpose.
c) Approve the category-wise tariff submitted by MSEDCL to meet the revenue requirement of MSEDCL.
d) Approve rationalisation of the Fixed/Demand Charges, Reinstatement of Fixed/ Demand Charges at the levels as per MYT order dated May 18, 2007 for all categories of consumers excluding BPL and consider deciding a road map to gradually increase the fixed charges so as to fully recover the fixed costs through fixed tariff component.
e) Approve minor increase in tariff of Agriculture (HT & LT), LT Domestic (BPL & up to 100 units).
f) Approve a new slab of above 1000 units consumption in LT I category as proposed in the Petition.
g) Approve two sub-categories in HT II commercial
    a. Government Owned and/or aided educational institutes and Hospitals,
    b. Other consumers like Malls, Multiplexes, and Private/Trust Hospitals, etc., and no tariff hike for sub-category (a).
h) Approve two sub-categories in LT II commercial
    a. All Education institutions, Hospitals& Dispensaries.
    b. Other non-residential and commercial consumers and no tariff hike for sub-category (a)
i) Approve 10% surcharge over base tariff for HT II commercial consumers connected on express feeders.
j) Approve 5% discount on energy bill for pre-paid metering.
k) Approve re-categorisation of IT and ITES, Mobile Towers, BPO Centres, etc., under Commercial category.

l) Approve power supply for construction purpose to be categorised as temporary consumer except for individual consumers up to 500 units per month.
m) Encourage Franchisee through MoU routes.
n) Approve the interest rate to be charged on arrears as 12% flat per annum for agricultural consumers and for all other consumers, the existing interest rates are proposed to be continued.
o) Any variation in the rates of power purchase from MSPGCL, CGS and RGPPL as considered by MSEDCL in this Petition may be allowed to be recovered under FAC mechanism/Additional Charge..
p) Reconsider MSEDCL's request of proportionate FAC and removal of 10% cap on FAC in light of following:
    a. Commission's policy of differential tariff or different categories of consumers based on the provisions of the Electricity Act 2003 and subordinate Regulations.
    b. Had MSEDCL or the Commission been able to exactly foresee the power purchase cost for future tariffs, the energy charges for different categories of consumers would have been decided considering the estimated power purchase cost and the said impact would have been in the same proportion.

The Commission, vide its letter dated March 10, 2010, forwarded the preliminary data gaps and information required from MSEDCL. MSEDCL submitted its replies to the preliminary data gaps and information requirement on March 15, 2010.

The Commission held a Technical Validation Session (TVS) on MSEDCL's APR Petition for FY 2009-10 and Tariff Petition for FY 2010-11, on March 17, 2010 in the presence of authorised Consumer Representatives. The list of individuals, who participated in the TVS, is provided at **Appendix-1**. During the TVS, several discrepancies and data inconsistencies/gaps were identified and the Commission directed MSEDCL to submit the additional data and clarifications, and to make copies of the same available to the authorised Consumer Representatives.

1.8 Admission of Petition and Public Process

MSEDCL submitted its responses to the queries raised during the TVS, on April 7, 2010, and the Commission admitted the APR Petition of MSEDCL on April 8, 2010. In accordance with Section 64 of the EA 2003, the Commission directed MSEDCL to publish its application in the prescribed abridged form and manner, to ensure public participation. The Commission also directed MSEDCL to reply expeditiously to all the suggestions and comments from stakeholders on its Petition. MSEDCL issued the public notices in English and Marathi newspapers inviting suggestions and objections from stakeholders on its APR Petition. The Public Notice was published in newspapers on April 10, 2010 and April 11, 2010. Further, as directed by the Commission, MSEDCL made available the copies of the Executive Summary of its Petition (both in English and Marathi version) and the APR Petition admitted by the Commission for inspection/purchase by members of the public at MSEDCL's offices and on MSEDCL's website (www.mahadiscom.in). The Executive Summary and Public Notice were also available for download on the website of the Commission (www.mercindia.org.in) in downloadable format. The Public Notice specified that the suggestions and objections, either in English or Marathi, may be filed in the form of affidavits along with proof of service on MSEDCL.

The Commission received written objections expressing concerns primarily on several issues, including procedural issues, distribution losses, sales projections, power purchase, tariff categorisation, cross-subsidy, etc., in case of MSEDCL. The list of objectors, who participated in the Public Hearing, is provided in **Appendix- 2**.

The Commission held combined Public Hearings for MSPGCL, MSETCL and MSEDCL at Amravati, Nagpur, Nashik, Pune, Aurangabad and Navi Mumbai during the period from May 14, 2010 to May 22, 2010, as per the following schedule. Consumer Representatives also participated actively in this process.

S.No	Place/Venue of Public Hearing	Date of Hearing
1	**Amravati:** Hall No. 1, Divisional Commissioner's Office Camp, Amravati, District – Amravati	May 14, 2010

S.No	Place/Venue of Public Hearing	Date of Hearing
2	**Nagpur:** Vanamati Hall, V.I.P Road, Dharampeth, Nagpur, District – Nagpur	May 15, 2010
3	**Nashik:** Niyojan Bhavan, Collector Office Campus, Old Agra Road, Nasik – 422101	May 17, 2010
4	**Pune:** Council Hall, Office of the Divisional Commissioner, Pune, District - Pune - 411011	May 19, 2010
5	**Aurangabad:** Meeting Hall, Office of the Divisional Commissioner, Aurangabad, District – Aurangabad	May 21, 2010
6	**Navi Mumbai:** Conference hall, 7th Floor, CIDCO Bhavan, CBD, Belapur, Navi Mumbai - 400614	May 22, 2010

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

This Order is the detailed Order on the APR Petition filed by MSEDCL, which deals with the truing up for FY 2008-09, Annual Performance Review of FY 2009-10 and determination of Aggregate Revenue Requirement and Tariff of MSEDCL for FY 2010-11. Various objections that were raised on MSEDCL's Petition after issuing the public notice both in writing as well as during the Public Hearing, along with MSEDCL's response and the Commission's rulings have been detailed in Section 2 of this Order.

1.9 Organisation of the Order

This Order is organised in the following sixfive 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 at the beginning of this Section.

- **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 MSEDCL and the ruling of the Commission on each of the issues.
- **Section 3** of the Order details the Commission's analysis and decisions on the truing up sought by MSEDCL for FY 2008-09.
- **Section 4** of the Order discusses the Review of Performance for FY 2009-10, covering both physical performance and expenditure heads. This Section also details the Commission's analysis on various components of revenue requirement of MSEDCL for FY 2010-11, including sales projections, distribution losses, energy balance, power purchase, O&M expenses, etc.
- **Section 5** of the Order details the Tariff Philosophy adopted by the Commission and the category-wise tariffs applicable for FY 2010-11.

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

2.1 Admissibilty of Petition

Omsairam Steels & Alloys Pvt. Ltd. and others submitted that the Petition of MSEDCL is not maintainable as it against the principles of Multi-Year Tariff (MYT) and is also against the provisions of Section 61(f) of the Electricity Act, 2003 (EA 2003) and MERC Tariff Regulations. They submitted that Section 61(f) mandates the Appropriate Commission to adopt MYT principles while framing tariff. They also submitted that Regulation 12.1 of MERC Tariff Regulations, states that the Commission shall determine tariff under a MYT framework with effect from April 1, 2006.

Shri Madhusudan Roongta and others submitted that the Commission in the Tariff Order dated August 17, 2009 (Case No. 116 of 2008) directed MSEDCL to submit the APR Petition in first half of FY 2009-10 but MSEDCL delayed the submission of the Petition. He further submitted that after the completion of first Control Period of MYT, MSEDCL was required to submit the data for finalising second MYT Control Period of five years, which has also been delayed by MSEDCL.

Tata Motors submitted that as per the MERC Tariff Regulations, under a MYT framework, the application for determination of tariff for any financial year shall be made not less than one hundred and twenty (120) days before the commencement of such financial year. Accordingly, it was essential for MSEDCL to submit the APR Petition to the Commission by November 30, 2009. In the Tariff Order for FY 2009-10, the Commission had also directed MSEDCL to submit the APR Petition latest by November 30, 2009. Tata Motors added that MSEDCL has not followed the guidelines laid down by the Commission and delayed the process by three (3) months, due to which, sufficient time is not available for review of MSEDCL's Petition. Tata Motors and several other objectors requested the Commission to instruct MSEDCL that if they do not strictly follow the guidelines, their Petition will be rejected.

Ispat Industries Limited submitted that MSEDCL has been repeatedly defaulting on the timelines and is failing to comply with the MERC Tariff Regulations by not filing the Petition as per the timelines specified in the Regulations.

MSEDCL's Reply

MSEDCL submitted that the present petition for Annual Performance Review of FY 2009-10 has been filed as per Clause 17.1 and 17.3 of the MERC Tariff Regulations. MSEDCL submitted that the current Petition is maintainable and is as per the guidelines laid down by the EA 2003. Also, the Commission has already admitted the petition after Technical Validation Session.

MSEDCL submitted that the APR Petition for FY 2009-10 was submitted to the Commission, and as per Regulation 90 of MERC (Conduct of Business) Regulations, 2004, the Public Notice was published on April 10, 2010 and April 11, 2010, well before the actual dates of Public Hearing. Hence, the consumers' contention that sufficient time was not available, is not correct.

MSEDCL submitted that the Commission had issued the Tariff Order on August 17, 2009 in Case No. 116 of 2008, wherein it had directed MSEDCL to submit the APR Petition for FY 2009-10 by November 30, 2009. During the month of October 2009, MERC floated an Approach Paper for the second MYT Control Period, wherein principles for tariff determination were proposed to be changed from that prevailing in the existing MYT Control Period. The Commission has proposed new Regulations in place of existing MERC (Terms and Conditions of Tariff Determination) Rregulations, 2005. Subsequently, as part of discussions with the stakeholders, the Licensees/Utilities in Maharashtra had submitted their suggestions/objections to the Commission. Later, the Commission intimated deferment of the second MYT Control Period by one year and directed the Utilities to submit the APR Petition for FY 2009-10 as a continuation/extension of the first MYT Control Period latest by December 31, 2009. In pursuance of the said direction, MSEDCL submitted the APR Petition before the Commission within minimum time, based on the MERC Tariff Regulations applicable for the first MYT Control Period.

MSEDCL added that it has not abnormally delayed the submission of APR Petition for FY 2009-10, and almost all Utilities have submitted the APR Petition either on December 31, 2009 or thereafter.

Commission's Ruling

As regards the contentions that MSEDCL's Petition should be rejected since it is not in conformance with the EA 2003 and MERC Tariff Regulations, the Commission has ensured that the expenses and revenue have been considered in accordance with the EA 2003 and MERC Tariff Regulations.

There is no denying that there has been a delay on the part of MSEDCL in submitting the APR Petition. Since, MSEDCL has been repeatedly claiming that it has severe liquidity problems, it would have been in MSEDCL's own interest to file the complete APR Petition on time.

Despite the delay in filing of APR Petition by MSEDCL, the Commission has ensured that the stakeholders have had adequate time to study the documents and give their considered inputs on the same. The Public Notice was published on April 10 and April 11, 2010, and the Petition documents were made available from the same day. Stakeholders were given enough time to file the objections. The Public Hearings were held between the period from May 14, 2010 to May 22, 2010 in six locations in the State of Maharashtra, and oral objections submitted even at the time of the Public Hearing have been considered. Thus, the Commission is of the view that sufficient opportunity has been given to the stakeholders to submit their objections and comments on MSEDCL's APR Petition. In any case, since tariff determination is a time bound exercise under Section 64 of the EA 2003, no further relaxation of time could be made for submission of suggestions and objections by the public in the interests of consumers, as the same would have resulted in delay in issuing of the Tariff Order thereby resulting in a delay in applicability of the Tariff and consequently a significant change in the revenue that could be collected by the Utility, and hence, an impact on the tariff levied on consumers.

2.2 Procedural Issues

Wadia Ghandy & Company submitted that the Petition of MSEDCL and the accompanying documents are extremely voluminous and contains complex technical data. Analysis of such data and its implications on the consumers requires substantial amount of time and effort. The aid of experts is necessary to decipher the true intent and meaning and purpose of the Petition. Various fundamental errors, faults and inconsistencies have crept in to the Petition and time is required for examining the same.

They suggested that the time period of 21 days granted for filling objections/comments/submissions/suggestions is insufficient for consumers. Hence, the Commission should extend the time limit for filing objection/comments/submissions/ suggestions by at least 3 months keeping in view the size and complexity of the Petition.

MSEDCL's Response

MSEDCL has not submitted any reply to the above objection

Commission's Ruling

The Commission has ensured that the stakeholders have had adequate time to study the documents and give their considered inputs on the same. The Public Notice was published on April 10 and April 11, 2010, and the Petition documents were made available from the same day. Stakeholders were given enough time to file the objections. The Public Hearings were held between the period from May 14, 2010 to May 22, 2010 in six locations in the State of Maharashtra, and oral objections submitted even at the time of the Public Hearing have been considered. Thus, the Commission is of the view that sufficient opportunity has been given to the stakeholders to submit their objections and comments on MSEDCL's APR Petition. In any case, since tariff determination is a time bound exercise under Section 64 of the EA 2003, no further relaxation of time could be made for submission of suggestions and objections by the public in the interests of consumers, as the same would have resulted in delay in issuing of the Tariff Order thereby resulting in a delay in applicability of the Tariff and consequently a significant change in the revenue that could be collected by the Utility, and hence, an impact on the tariff levied on consumers.

2.3 Non-compliance of Regulations

Shri Madhusudan Roongta and others submitted that the proposed tariff is against the objectives of Electricity Regulatory Commissions (ERC) Act, 1998, Electricity Act, 2003 (EA 2003), National Electricity Policy (NEP), Tariff Policy (TP) and various Regulations of MERC. They submitted that since the year 2006, in every Tariff Order, there has been a steep increase in tariff particularly for industrial consumers, which is not in accordance with the spirit of the above mentioned Acts and Regulations.

Dr. S.L. Patil of TBIA, an authorised Consumer Representative, submitted that MSEDCL has not followed Section 161 of the EA 2003 and has not filed any details regarding the preventive measures taken for avoiding accidents.

The Nashik Municipal Corporation submitted that MSEDCL is not complying with MERC Tariff Regulations, 2005.

MSEDCL's Response

MSEDCL submitted that the present Petition for Annual Performance Review of FY 2009-10 has been filed as per Clauses 17.1 and 17.3 of the MERC Tariff Regulations. MSEDCL submitted that the present Petition is maintainable and is as per the guidelines laid down by the EA 2003. Further, the Commission has already admitted the Petition after Technical Validation Session.

Commission's Ruling

The Commission has undertaken the present exercise of Annual Performance Review of FY 2009-10 and tariff determination for FY 2010-11 under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003). Other issues such as accidents, etc., do not come under the purview of the present proceedings.

2.4 Non-compliance of directives

Shri Madhusudan Roongta and others submitted that most of the directives given by the Commission in the previous Tariff Orders have not been complied with by MSEDCL, as per the details submitted by MSEDCL regarding compliance of directives. One of the most important directives given by the Commission is completion of metering and submission of energy accounting data. MSEDCL is not able to complete even DTC metering and has not compiled the energy accounting data. They requested the Commission to use its powers under the EA 2003 for non-compliance of its directives.

Dr. S. L. Patil of TBIA submitted that the Commission expressed its anguish regarding replacement of about 50 Lakh meters by MSEB in one year, without obtaining permission of the Commission. He submitted that the Commission has directed MSEDCL to complete metering of 2.5 Lakh DTCs and submit energy accounting data. He also submitted that despite the Commission having given many directions regarding 100% DTC metering, MSEDCL hass ignored all these directions and has not completed 100% metering till date. He further submitted that when MSEDCL could replace 50 Lakh meters in one year, then there was no reason for not completing metering of 2.5 Lakh DTCs in 5 years. He requested the Commission to direct MSEDCL to complete 100% DTC metering and submit energy accounting data within 3 months, with the provision of huge penalty if MSEDCL fails to comply with the directions.

MSEDCL's Response

MSEDCL submitted that it has already complied with almost all directives of the Commission, barring few, which require extensive field exercise encompassing the entire State of Maharashtra. MSEDCL further submitted that delay in compliance of the Commission's directives due to practical difficulties of MSEDCL should not be construed as non-compliance of the same.

MSEDCL added that in the reply to queries raised by the Commission, MSEDCL has already submitted zone-wise/circle-wise energy accounting data, i.e., input/output energy consumption of metered and un-metered consumers and losses.

Commission's Ruling

The present proceedings are under Section 62 of the EA 2003 and issues related to tariff directly only come under the purview.

2.5 Compliance with EA 2003

Shri Ponrathnam and others submitted that the principle of telescopic slab-wise tariff in residential category, gradual elimination of cross-subsidy, creation of more categories, details of cost of supply according to Section 61 (g) of the EA 2003, and categorisation of consumers according to Section 62 (3) of the EA 2003, needs to be crystallised before undertaking tariff fixation.

MSEDCL's Response

MSEDCL submitted that the process of finalizing the road map for cross-subsidy reduction is in the initial stage and the cross subsidy reduction road map can be formulated only after due consultation with all stakeholders. MSEDCL added that the cross subsidy is directly linked to the Aggregate Revenue Requirement, which in turn is directly impacted by various uncontrollable factors and all these issues need to be looked into while deciding the tariffs for various categories.

MSEDCL submitted that the Commission is yet to finalise the road map for cross-subsidy reduction and hence, MSEDCL is unable to make any comments on the same.

Commission's Ruling

The Commission has separately initiated a consultative process for formulating the roadmap for cross-subsidy reduction. As regards consumer categorisation, the Commission has already deliberated on the philosophy adopted by the Commission in accordance with Section 62(3) of the EA 2003, in its previous Tariff Order, which has been elaborated again in this Order for the benefit of the stakeholders.

2.6 Energy Sales

Urja Sahayog Sangh submitted that in its Petition, MSEDCL has projected zero growth in un-metered agriculture consumers, however, no reduction in the consumption has been considered.

MSEDCL's Response

MSEDCL submitted that the Commission, in its Order dated October 20, 2006 in the matter of determination of ARR has ruled that the "*recorded consumption of metered consumers would form the basis of estimation of agriculture consumption or as an alternative based on the complete DTC metering*". The Commission has computed unmetered Agriculture consumption with the same method, i.e., based on recorded consumption of metered agricultural consumers for FY 2006-07 and has directed to use the same method for the purpose of filing MYT/APR Petitions.

Accordingly, for the purpose of APR Petition, based on the Commission's directives, MSEDCL has computed un-metered agriculture consumption as per the following methodology:

1) While computing kWh/HP norm, only the consumers with normal meter status having progressive reading (negative and zero consumption excluded) have been considered by MSEDCL.

2) Consumption of consumers having consumption greater than 224 kWh/ HP/ Month has been capped by MSEDCL at 224kWh/HP/ Month, based on the following rationale:

    a. Maximum 3000 running hours per year and 300 days of operation, i.e., 10 Hours per day

    b. 0.746 kW (1HP) X 10 hrs X 30 days = 224 kWh / HP/Month

    c. The sub-division wise kWh/HP norm has been applied to all unmetered consumers under that sub-division to compute unmetered consumption.

Based on the above methodology, MSEDCL computed consumption of unmetered agriculture consumers for FY 2008-09 as 7069 MU.

MSEDCL submitted that it has considered that LT IV Agriculture (Un-metered) consumption would remain same for FY 2008-09, FY 2009-10 and FY 2010-11 as it has stopped releasing new un-metered connections.

Commission's Ruling

The Commission has accepted the sales to LT IV Agriculture Unmetered category as 7069 MU as submitted by MSEDCL for FY 2008-09, as the methodology adopted by MSEDCL to estimate the un-metered consumption is in accordance with the method recommended by the Commission. The Commission has approved the same level of sales for FY 2009-10 and FY 2010-11. This issue is discussed in detail in Section 3 and Section 4 of this Order.

2.7 Abolition/ Rationalisation of Fixed Charges

Shri Shiv Agarwal, President, Vidarbha Atta Chakki Association, submitted that MSEDCL has proposed to increase the fixed charges of LT V Industries from Rs. 150/Connection/Month to Rs. 300/Connection/Month in FY 2010-11. He further submitted that very small, tiny and micro industries, which have very low income are covered under LT V Industries. If fixed charges are increased to Rs. Rs. 300/Connection/Month, such industries will shut down, which will result in unemployment, labour unrest and disturbance in public and social administration. He further submitted that at present, there is load shedding of 8-10 and 16-18 hours in cities and villages, respectively. He submitted that MSEDCL has failed to supply continuous electricity to its consumers and hence, the proposed increase in fixed charges is not justified. He further submitted that the fixed charges should be completely abolished.

TBIA requested the Commission to retain the demand charges till complete relief from load shedding is not provided to the consumers by MSEDCL. Palghar Taluka Industries' Federation submitted that 100% increase in fixed charges is not required at all. Tata Metaliks Limited submitted that MSEDCL has proposed hike of 100% in demand charges in the Petition which is very high. It further requested the Commission to retain the demand charges at existing level. Shri Balaji Fibres submitted that fixed charges for HT Industry, i.e., HT I and HT I-Seasonal should not be increased.

Shri. Pratap Hogade, Chief General Secretary, Janata Dal (Secular), Maharashtra submitted that the increase in Fixed Charges by 100%, as proposed by MSEDCL, is completely unjustified in light of the present load shedding of around 10 to 12 hours in rural areas and 3 to 7 hours in urban areas.

Shri Ponrathnam and others submitted that it may be noted that the BEST has not proposed any change in fixed charges in its Petition while TPC-D has proposed 50% increase in fixed charges in its Petition. However, MSEDCL has proposed 100% increase in fixed charges. They further suggested that the decision on the issue of increase in fixed charges should be taken in a holistic manner.

Vidarbha Chambers of Commerce & Industry and others submitted that MSEDCL has proposed 100% increase in fixed charges for all categories and no proper justification has been given for the proposed increase. Out of the proposed 16% increase in tariff, 14% has been proposed by doubling the fixed charges. It further submitted that MSEDCL is interested in increasing fixed charges as the recovery of fixed charges is most convenient. This abnormal rise will be a heavy burden on the consumers and any increase in fixed charges should not be allowed. Sandip Foundation and others submitted that at present MSEDCL is not able to supply power to consumers to meet their demand. Against this background, MSEDCL's proposal to increase the fixed charges by 100% should be rejected.

Shri Anil Chavan submitted that the tariff of Government Owned and/or aided educational institutes is proposed to remain unchanged. The load factor incentives are being paid to the industrial consumers while the domestic consumers have to pay more tariffs for higher consumption of electrical units. The average consumption of domestic consumers is 200 units per year while the National target is 1000 units per year. Therefore, keeping this target in view, the different tariffs for different slabs of consumption, (0-100, 101-300, etc.) should be abolished.

Mula Pravara Electric Co-operative Society Limited (MPECS) submitted that even after the ATE Judgment, MSEDCL is still levying the demand charges according to its earlier practice, i.e., arithmetical summation of maximum demand instead of actual simultaneous maximum demand.

MSEDCL's Response

MSEDCL submitted that total expenditure has two components:

a) Variable component
b) Fixed component

MSEDCL submitted that variable component accounts for the expenditure that varies as per the availability of power, such as power purchase expenses, transmission charges, etc., whereas fixed component has to be incurred irrespective of availability of power, such as O&M expenses, depreciation, interest, finance charges, etc. MSEDCL further submitted that the variable charges depend on power purchased (MU), while fixed charges are independent of MU purchased/handled.

MSEDCL added that the Commission, in its Order dated December 1, 2003, stated that the Commission has continued the process of increasing the recovery of fixed costs by levy of fixed charges to safeguard the erstwhile MSEB from steep fluctuations in revenue with varying consumption over time. Further, the Commission increased the fixed charges and ruled that if the Utility is not allowed to recover fixed cost for the period of interruptions and low voltage period, it would adversely affect the financial viability of the Utility.

MSEDCL submitted that the Commission, in its Tariff Order issued in June 08, unilaterally decided to reduce the fixed charges applicable to different categories of consumers citing the reduced availability of power supply. MSEDCL further submitted that the reduction of fixed charges may not be correct for some categories like HT-I Industries (Express feeder), HT PWW (Express feeder), etc., that are exempted from load shedding. Similarly, in case of HT Industries (Non-express feeder) and HT-PWW (Non-express feeder) consumers are subjected to limited duration of load shedding and during the remaining period, these consumers are provided regular supply of power. MSEDCL added that the Commission's decision to reduce the fixed charges defeats the principle laid down in the Tariff Order dated May 5, 2000, where the Commission ruled that the fixed costs should be recovered through the fixed charges and observed that the fixed charged component of tariff needs to be gradually increased.

MSEDCL submitted that the fixed charges for all categories except BPL need to be gradually increased so as to recover the fixed cost through fixed charges. MSEDCL also requested the Commission to decide a road map to gradually increase the fixed charges, such that the fixed costs are fully recovered through the fixed charge component of tariff.

As regards Shri Chavan’s objection, MSEDCL submitted that the Government Owned and/or aided education institutes are presently classified under HT-II (Commercial) or LT-II (Commercial) categories. The tariff applicable to these categories is higher than the average cost of supply of MSEDCL. However, it will be appreciated that looking at the social obligation fulfilled by these institutions, a sub-category has been proposed in the HT-II and LT-II Commercial category (carved out of the original HT II/LT II Commercial category), which will exclusively cover Government owned or 100% aided Hospitals, Educational Institutions and other Social Institutions with 100% Government grant. It further submitted that it has proposed status quo in the tariff applicable to these categories, i.e., existing commercial tariffs. It further submitted that creation/abolition of consumer categories is determined by the Commission in accordance with EA 2003 and Regulations made thereafter.

Commission's Ruling

In the APR Order for FY 2007-08, the Commission had consciously reduced the fixed/demand charges, in response to the several objections submitted by stakeholders in this context. In the APR Order for FY 2007-08 for MSEDCL, the Commission observed as under:

> *"The Commission has reduced the fixed charges/demand charges applicable for different consumer categories, and correspondingly increased the energy charges, so that the bills are more directly linked to the consumption. Economic theory states that the recovery of fixed costs through fixed charges should be increased, so that a reasonable portion of the fixed costs are recovered through the fixed charges. However, the ability of the Licensees to supply reasonably priced power on continuous basis has been eroded due to the stressed demand-supply position in recent times, and hence, the Commission has reduced the fixed charges. This will provide certain relief to the consumers who have lower load factor, as the consumers will be billed more for their actual consumption rather than the load, and the licensees also have an incentive to ensure that continuous 24 hour supply is given to the consumers. As and when sufficient power is available and contracted by the licensees, the fixed charges can again be increased, and energy charges reduced correspondingly."*

As stated in the APR Order for FY 2007-08, the fixed/demand charges were reduced only as a measure to incentivise MSEDCL to contract for the necessary power requirement and ensure continuous supply of power to its consumers. Moreover, the present fixed/demand charges do not affect the MSEDCL adversely, as the tariff determination process ensures revenue neutrality of the MSEDCL and approved tariff allows MSEDCL to recover the approved revenue gap. Since, MSEDCL claims in this Petition that it is striving to contract for the necessary power to meet the demand requirements, there would be no loss to MSEDCL. Hence, the Commission has retained the fixed/demand charges for all consumer categories at the existing level.

2.8 Energy Charges

Jawahar Shetkari Sahakari Soot Girni Limited submitted that MSEDCL has proposed 8.32% increase in energy charge for HT-I category, which is very high.

Nashik Municipal Corporation submitted that MSEDCL has proposed an increase of 13.24% in energy charges for street lights, which is very high, and requested the Commission to rationalise the energy charges for street lights.

Sandip Foundation submitted that MSEDCL's proposal to increase the tariff should not be considered, and rather, the tariffs should be reduced to be at par with that prevailing in other States.

MSEDCL's Response

MSEDCL submitted that the total revenue gap for FY 2010-11, after considering the impact of APR Petitions filed by MSPGCL and MSETCL for FY 2010-11, is Rs 4166 Crore, which requires an average increase of 14% over the existing tariff. MSEDCL further submitted that the projected revenue gap needs to be recovered, to ensure viability of business. MSEDCL submitted that power Purchase cost including transmission charges constitutes about 75 to 80% of the Revenue Requirement of MSEDCL, over which it has no control. MSEDCL added that the average cost of supply has increased by 12 % over the level approved by Commission in the last Tariff Order, hence, MSEDCL has been compelled to propose increase in tariff in order to serve its customers better along with supplying reliable and quality power.

Commission's Ruling

The Commission has analysed each head of expense and revenue mentioned by MSEDCL, and its treatment as well as the final truing up for FY 2008-09 has been elaborated in Section 3 of this Order, while the provisional truing up for FY 2009-10 and determination of ARR and tariff for FY 2010-11, has been elaborated in Section 4 of this Order. The average tariff increase allowed by the Commission is significantly lower than that sought by MSEDCL.

2.9 TOD Tariff

Sandip Foundation submitted that the Time of Day (TOD) tariff should not be considered for educational institutions. Ispat Industries and others submitted that TOD mechanism introduced by the Commission in Maharashtra with the objective of smoothening the load curve, is well appreciated. However, for the consumers who run continuous process industries, disincentive paid during peak hours is too high. Ispat Industries suggested that benefits of operations of continuous process industries far exceeds the peak hour disincentive cost, and hence, peak hour disincentive needs to be discontinued. Ispat Industries also suggested that incentive during off peak hours should be continued.

MSEDCL's Response

MSEDCL submitted that it is following the Commission's directions regarding implementation of TOD Tariff. The Commission is the competent authority to decide on this matter and the Commission's decision in this regard will be binding on MSEDCL.

Commission's Ruling

The Commission agrees with the views of the consumers and has hence, continued the present dispensation of TOD tariffs.

2.10 Power Purchase

Shri Madhusudan Roongta and others submitted that one of the reasons for increase in the cost of supply is the need for costly power purchases. MSEDCL should draw up long-term plan to procure power from cheaper sources. He further submitted that another reason is inefficiency of MSPGCL and its low load factor and continuous increase in cost of production, which is affecting the cost of supply of MSEDCL.

Vidarbha Chamber of Commerce & Industry submitted that MSEDCL has projected total power purchase expenses of Rs. 25605 Crore. It further submitted that the demand in the State is on the higher side and MSEDCL has to purchase power from other sources at a very high rate, i.e. Rs. 5 to 7 per unit.

Bharat Forge and others submitted that MSEDCL has proposed that costliest power (RGPPL Power) will be utilised for Zero Load Shedding (ZLS) of revenue/district HQs. They submitted that under such circumstances, the justification for considering RGPPL under power purchase expenses needs to be established.

Tata Motors Limited requested the Commission to disallow the costly power purchase of Rs. 657 Crore from traders in FY 2009-10. It further submitted that from the CEA Report, it is evident that MSEDCL has purchased 91652 MU vis-a-vis its requirement of 85261 MU, which MSEDCL has not considered in its Petition.

Shri R.B. Goenka submitted that the average cost of short term sources as shown by MSEDCL in the Petition is higher as compared to UI charges.

Ispat Industries Limited submitted that MSEDCL should have purchased power through Unscheduled Interchange (UI) at an average rate of Rs. -0.02/kWh instead of buying 941 MU from traders at an average cost of Rs. 6.98/kWh for FY 2009-10, since, purchase of an additional quantum of 500 MU under UI would reduce the power purchase cost by Rs. 349 Crore for FY 2009-10. Similarly, purchasing 470 MU from UI would have reduced the power purchased costs by Rs. 119 Crore in FY 2010-11. Further, MSEDCL has shown 11000 MU of power purchases from RGPPL at an average rate of Rs. 4.26/kWh, which is significantly higher than the average power purchase cost of Rs. 2.32/kWh for FY 2008-09.

TBIA submitted that long-term power purchase agreements should be entered into at reasonable rates and sufficient power should be purchased to get over the demand-supply crisis. Shri Ponrathnam and others submitted that the Commission should direct MSEDCL to enter into long term power purchase agreement for the required demand/energy at a reasonable price with the approval of the Commission, for ensuring uninterrupted power supply. He further submitted that the PPA with MSPGCL seems to be very liberal without commitment of quality and price. The price estimation on part of MSEDCL seems to be very uncertain.

MSEDCL's Response

MSEDCL submitted that it has already entered into long-term power purchase through Case-1/Case-2 route from Ultra Mega Power Plants (UMPP), CGS and MSPGCL, and has planned to contract the required generation capacity such that the supply shortfall will be mitigated by FY 2012-13.

MSEDCL submitted that it has two primary sources of firm power, viz.

- Maharashtra State Power Generation Company Limited (MSPGCL)
- Purchase from Central Generating Stations

MSEDCL submitted that in addition to the above sources, it buys power from the Ratnagiri Gas Power Private Limited (RGPPL), Power Trading Companies, Power Exchanges and other sources such as non-conventional sources, including co-generation, wind power and surplus power from captive plants.

As regards cheap power available from UI, MSEDCL submitted that UI happens only when there is change in schedule either by generating station or load centre. MSEDCL further submitted that UI cannot be treated as a platform from where power can be sourced to meet the demand. MSEDCL further submitted that the basic premise of ABT (Availability Based Tariff) Mechanism, which stipulates UI, is based on grid discipline. Each Utility is supposed to adhere to the schedule for 96 blocks of 15 minute each every day, failing which there is inherent penalty. Therefore, considering UI as a sourcing of power is incorrect.

Commission's Ruling

The Commission has been regularly directing MSEDCL to enter into the necessary long-term power purchase agreements at reasonable prices, to mitigate the demand-supply gap in its licence area. For FY 2010-11, based on the projected sales and allowed distribution losses, the energy requirement and power purchase from various sources has been considered, as elaborated in Section 4 of this Order. Based on the Commission's realistic projections of sales and power purchase, there is no requirement to purchase power from traders in FY 2010-11.

2.11 Transmission charges

Urja Sahayog Sangh submitted that the increase in transmission charges from Rs. 1494 Crore in FY 2009-10 to Rs. 2052 Crore in FY 2010-11 as projected by MSEDCL in the Petition, is very high.

Shri A.R. Bapat submitted that the transmission charges for FY 2008-09, FY 2009-10 and FY 2010-11 are Rs. 1740 Crore, Rs. 1494 Crore and Rs. 2052 Crore, respectively, whereas energy transmitted through transmission network during these years is 75 BU, 80 BU and 87 BU respectively, which shows an uneven pattern.

MSEDCL's Response

MSEDCL submitted that the transmission charges for FY 2010-11 have been considered based on the APR Petition for FY 2009-10 filed by MSETCL before the Commission.

Commission's Ruling

The Commission has considered the intra-State transmission charges payable by MSEDCL for FY 2010-11, based on the approved intra-State transmission charges determined in the Commission's Order in Case No. 120 of 2009, as elaborated in Section 4 of this Order.

2.12 Capital expenditure schemes

Shri Madhusudan Roongta and others submitted that MSEDCL in the Petition has proposed to spend a huge amount on capital expenditure schemes. They further submitted that higher investment on capital expenditure schemes increases expenses like depreciation, interest on long term loans, and Return on Equity, which is passed to the consumers in terms of tariff. If the projected benefits due to these capital expenditure schemes would have been realised then the tariff would also have been reduced in future years. This activity requires close monitoring of benefit of the schemes. They requested the Commission to obtain data on benefits achieved due to each capital expenditure scheme vis-a-vis the benefits projected so as to identify the officials responsible for non-achievement of projected benefits.

TBIA submitted that a critical review of capital investment to the tune of Rs. 31,000 Crore provided to MSEB Utilities (MSPGCL, MSETCL and MSEDCL) and its impact on the consumers should be conducted.

Prayas submitted that there has been steep increase in capital expenditure related costs such as depreciation, advance against depreciation, interest on long term loan capital and return on equity. It further submitted that as MSEDCL has huge plans of capital expenditure, these costs are likely to soar even higher in coming few years. It further submitted that MSEDCL should submit the rationale followed for capex prioritisation.

Shri R.B. Goenka submitted that the capital expenditure proposed by MSEDCL is very high. He further submitted that MSEDCL has neither projected the benefits nor the reduction in distribution losses due to the capital expenditure to be undertaken by MSEDCL.

Urja Prabodhan Kendra submitted that total capital expenditure has increased by 50% as compared to the capital expenditure approved by the Commission in last APR Order. It further submitted that these figures indicate that MSEDCL has not taken any action to check the expenses and has passed on the burden of its inefficiency to the consumers.

Shri Anil Chavan submitted that MSEDCL has spent a huge amount for the capital works in last few years. He further submitted that it should give detail about the capitalisation of expenses because consumers are paying the interest on the loan amounts.

MSEDCL's Response

MSEDCL submitted that it has broadly proposed the capital investment plan under the following heads:

i) APDRP Schemes - Departmental Works, Meters, SCADA, Ongoing works, etc;

ii) Infrastructure Works Plan - To provide reliable, quality supply and improve the Standards of Performance, addition of infrastructure to meet load growth, reduction of distribution losses;

iii) Demand Side Management Schemes –Load Management, Gaothan Feeder Separation Scheme, Fixed Capacitor Scheme;

iv) Automatic meter reading;

v) RGGVY - Electrification of rural households including 100 % BPL households and associated infrastructure works;

vi) Agriculture metering – Metering of un-metered agriculture connections, etc.

MSEDCL submitted that besides the above major capital investment plan, it has also proposed various other small schemes for Demand Side Management, load growth, DTC metering, etc.

MSEDCL added that it has been continuously submitting the Detailed Project Reports for all the schemes in excess of Rs 10 Crore as per the requirement of the MERC Tariff Regulations, giving detailed cost benefit analysis of each scheme.

MSEDCL submitted that Single Phasing Scheme has not been included in the proposed capital expenditure, as the Commission has not approved the same.

Commission's Ruling

The Commission, in the previous APR Order, directed MSEDCL to submit detailed report with established benefits vis-a-vis the benefits projected. Since, MSEDCL has not submitted the detailed report, the Commission has not considered any revision in capitalisation for FY 2007-08. Also, since, MSEDCL has not submitted the cost-benefit analysis for FY 2008-09, the Commission has considered capitalisation of only 50% against the approved DPR Schemes from FY 2008-09 to FY 2010-11 on adhoc basis. As regards Non-DPR Schemes, the Commission has considered Non-DPR Schemes up to 20% of the DPR Schemes, as elaborated in Section 3 and Section 4 of this Order.

2.13 Interest on Long Term capital

Urja Prabhodan Kendra and Urja Sahayog Sangh submitted that interest on long term capital as submitted by MSEDCL in its Petition is double the interest on long term capital as approved by the Commission in last APR Order.

MSEDCL's Response

MSEDCL has computed interest on long term capital by adding the interest on existing long term loans and new loans to be drawn during the respective years for undertaking projected capital expenditure. MSEDCL submitted that the details of interest calculation of existing loans and new loans are provided in the corresponding data forms along with the APR Petition.

MSEDCL further submitted that for the purpose of estimating the requirement of loan drawal, it has adopted the following methodology:

1. The financing plan linked to the Capital Expenditure Plan has been prepared on the basis of existing approved funding and the limitations in terms of infusion of equity or internal accrual.
2. MSEDCL submitted that in many schemes, it has assumed debt to the extent of 90%.
3. MSEDCL submitted that the Government of Maharashtra has pledged infusion of equity of Rs.2298.09 Crore to MSEDCL vide letter no. Vi.Pu.A/2008/case no.-25/Urja-3 dated September 10, 2008 but so far the Government of Maharashtra has released only Rs. 207.8 Crore during FY 2008-09. Therefore, it has no other option but to maintain equity infusion limited to funding from internal accruals for FY 2009-10 and FY 2010-11.

MSEDCL further submitted that it has assumed a moratorium period of three years for the new loans considered during the year. Further, interest rate of 13.5% has been considered on loan from PFC and 13% on loan from REC during current and ensuing year for the estimation of interest expenses on the new loans.

Commission's Ruling

The Commission has approved interest expenses based on approved capitalisation, as elaborated in Section 3 for FY 2008-09 and Section 4 for FY 2009-10 and FY 2010-11.

2.14 Interest on Working capital

Shri Madhusudan Roongta and others submitted that MSEDCL has submitted that receivables for FY 2008-09 are Rs. 10940 Crore, out of which arrears aged more than 3 years are Rs. 5744 Crore as on March 31, 2009. The arrears exclude MPECS' dues. Against this background, MSEDCL's request for allowing interest on working capital is unacceptable. They requested the Commission not to allow interest on working capital expenses to MSEDCL.

MSEDCL's Response

MSEDCL submitted that the computation of interest on working capital has been shown in Form 5 of the APR Formats. MSEDCL submitted that after restructuring of MSEB in FY 2004-05, Consumer Security Deposit to the tune Rs.1822.65 Crore appearing in the books of erstwhile MSEB, was allocated to it but this was a book entry rather than available cash in the form of Consumer Security Deposit. MSEDCL further submitted that as per MERC Tariff Regulations, it is allowed normative working capital requirement based on such high Consumer Security Deposit (including Rs. 1822.65 Crore pertaining to erstwhile MSEB) which works out to be negative. As per audited accounts of FY 2007-08, Consumer Security Deposit amount is Rs.2624.29 Crore. MSEDCL has collected Rs. 801.64 Crore as Consumer Security Deposit over the opening balance. However, Transfer Scheme is still under consideration before the Government of Maharashtra for finalisation.

MSEDCL further submitted that in order to maintain the Standards of Performance (SoP) and to discharge the obligations set by the Commission through various Regulations and EA 2003, it tried for transit finance from financial institutions as well as from GOM to support the newly incorporated Company. It was able to get Rs. 1300 Crore from Rural Electrification Corporation (REC) as short-term loan to support huge cash shortage and working capital gap in 2006. The majority of this amount was spent by MSEDCL on power purchase expenses to provide electricity to its consumers. MSEDCL has paid Rs. 72 Crore towards interest on REC short term loan during FY 2007-08 as per audited accounts. In addition, MSEDCL has considered a payment of Rs. 26 Crore in FY 2008-09 on account of interest on REC short term loan.

Commission's Ruling

The Commission has allowed Interest on Working Capital (IoWC) on a normative basis, as per MERC Tariff Regulations. For FY 2008-09, the Commission has considered actual IoWC for the purpose of sharing of efficiency losses, as elaborated in Section 3 of this Order.

2.15 Tariff Increase

Vidarbha Atta Chakki Association submitted that no permission should be granted for increase in electricity charges for any category as proposed by MSEDCL, till MSEDCL ensures continuous power supply along with reduction in distribution losses (presently 21.98%), otherwise it will become a faulty practice to be followed every year by MSEDCL.

Shri Madhusudan Roongta and others submitted that since the formation of the Commission, MSEDCL is regularly proposing tariff increase in its every Petition. Unlike other States, tariff in Maharashtra has increased steeply since 2006.

Shri R.B. Goenka submitted that in the last year, Rs. 4800 Crore was recovered by MSEDCL, without any public hearing on account of additional supply cost for withdrawal of load shedding, recovery for additional capacity charge of RGPPL, review of Commission's Tariff Order, hike in electricity duty, etc. He further submitted that public hearing should have been conducted for all the issues due to which tariff was increased and additional burden was passed to the consumers.

Bombay Small Entrepreneurs Association submitted that the ARR proposal should be submitted only once in the duration of 5 years in accordance with the Regulations.

Palghar Taluka Industries' Federation submitted that the tariff hike has been necessitated by mismanagement, delays in revenue collection by delaying sanctions, proposals and connections to industries. It also submitted that average tariff increase of 14% for HT Industries is unreasonable. It further suggested that instead of asking for increase in tariff, MSEDCL should improve its working, efficiency, responsibility of staff to remain in power supply business, reduce the transmission and distribution losses by regular maintenance, reduce thefts, etc.

Maharashtra State Cooperative Textile Federation Limited submitted that load shedding and high tariff has adversely affected the spinning industry and if tariffs increase further, then the spinning industry may collapse, which in turn will make 1 lakh people jobless. It further objected to the 8% increase in tariff for express feeder consumers as submitted by MSEDCL in its Petition.

Shri. Ponrathnam submitted that the consumers have to bear tariff shock each year only in the State of Maharashtra. The Commission should lay down the methodology and principle for determination of tariff in accordance with the EA 2003. The tariff proposed by the distribution companies should be approved by the Commission after prudence check.

Shri Balaji Fibres submitted that tariff for seasonal category industries should not be increased further, as it is already high, and seasonal category industries are agro based industries and run only for 4-6 months in a year.

MPECS submitted that the tariff proposed for MPECS is not affordable, and may not be permitted by the Commission.

Urja Sahayog Sangh submitted that the proposed increase in tariff for domestic consumers varies between 6% to 15% while proposed increase in tariff for non-domestic consumers varies between 3% to 4%, which is not justified.

Shri. Pratap Hogade, Chief General Secretary, Janata Dal (Secular), Maharashtra submitted that MSEDCL has proposed the tariff rate of 80 Paise/kWh for below poverty line (BPL) consumers, which is unjustifiable and the same should be 40 Paise/kWh to 50 Paise/kWh.

He further submitted that the proposed increase in tariff rates for metered agricultural consumers from 137 Paise/kWh to 160 Paise/kWh would burden the poor agricultural consumers. Also, as regards the un-metered consumers, MSEDCL has considered the average electricity usage as 2688 units per HP as against actual average of 1018 units per HP, which will burden the unmetered agricultural consumers further.

R.L. Steels Limited submitted that impact of the proposed tariff increase, especially in respect of HT Industrial consumers is excessive, unjust and unbearable. It further submitted that there is no co-relation between the figures in earlier proposals and the present proposal and thus, the figures and data in the proposal are not trustworthy. He requested the Commission not to allow the expenses under the truing-up exercise.

Tata Motors Ltd. submitted that the energy available at distribution periphery during FY 2009-10 was 70077 MU vis-a-vis sales requirement of 63113 MU, which means MSEDCL must have sold additional power available through traders. If power was sold to open market at an average rate of Rs. 4.35/kWh, the revenue could have been Rs. 3030 Crore. It further requested the Commission to reduce the present tariff by at least 10%.

MSEDCL's Response

MSEDCL submitted that it has submitted the tariff proposal according to Regulation 17 of MERC Tariff Regulations, and the Commission's direction in the Tariff Order in Case No. 116 of 2008 dated August 17, 2009. MSEDCL further submitted that the consumers' suggestions can only be considered by the Commission, which is the competent authority to decide on tariff as per Electricity Act 2003.

Commission's Ruling

The Commission has analysed each head of expense and revenue mentioned by MSEDCL, and its treatment as well as the final truing up for FY 2008-09 has been elaborated in Section 3 of this Order, while the provisional truing up for FY 2009-10 and determination of ARR and tariff for FY 2010-11, has been elaborated in Section 4 of this Order. The average tariff increase allowed by the Commission is significantly lower than that sought by MSEDCL.

2.16 Employee expenses

Shri Nathu Rambhad, contractor of MSEDCL, submitted that the wage revision should be related to the relative productivity. He submitted that the wages of MSEDCL's employees are around four times higher than that prevailing in Small Scale Industries (SSI) or Medium Scale Industries (MSI). He also submitted that the employees of MSEDCL got their wages increased by 30% through strikes. He also submitted that employee expenses of Rs. 2837 Crore as submitted by MSEDCL in the Petition can be brought down if O&M activities are outsourced. He further submitted that the A&G expenses may be clubbed with R&M expenses, which may result in net saving of Rs. 1912 Crore.

Bosch Limited submitted that the employee expenses have increased in 2 years by Rs. 351 Crore (14.6%), which is very high.

Shri R.B. Goenka and others submitted that MSEDCL serves 156.96 Lakh consumers in Maharashtra and sells 58171 MU. Further, they submitted that 75000 employees are working in MSEDCL which translates to 1.28 employees per unit. They added that the employee expenses of MSEDCL are the highest among all the States in India.
Ispat industries Limited added that MSEDCL should take up staffing study and determine the appropriate staffing pattern to carry out operations instead of recruiting based on ‘Sanctioned posts’. Further, MSEDCL should consider offering VRS scheme structured attractively with the Commission’s approval to reduce the number of employees. Further, Ispat industries Limited submitted that the escalation rates shown in the APR Petition for each of the heads, if considered for projecting the employee expenses, is for the purpose of factoring in either an increase in the salary paid or an increase in the number employees. Thus, MSEDCL should submit the reason behind projecting an escalation of 8% over and above the increase due to the pay revision. MSEDCL should provide the details of pay revision mentioning different grades of employees eligible for pay revision.

MSEDCL’s Response

MSEDCL submitted that the increase in Employee Expenses for FY 2009-10 compared to Commission’s approval is mainly due to the following reasons:

- Consideration of provision for revision of pay scale of MSEDCL employees due from April 1, 2008. to the extent of Rs.364 Cr. and Rs. 422 Cr. for FY 2008-09 and FY 2009-10, respectively. However, actual impact of FY 2008-09 has increased from Rs. 364 Crore to Rs. 417 Crore. In a similar manner, impact in FY 2009-10 is also more than the provision, which is implicitly embedded in revised basic salary of employee.

- MSEDCL submitted that the average age of line staff of MSEDCL is over 50 Years, which has increased the risk of accidents and delay in attending to faults and breakdowns. MSEDCL also submitted that it has initiated a Voluntary Retirement Scheme (VRS) for its line staff. MSEDCL expects that considerable number of employee will opt for this scheme.

The major increase is mainly due to the increase in 'Dearness Allowance' (DA) and 'Earned Leave Encashment'. While the Dearness Allowance is computed as a percentage of the basic salary, it has increased twice a year, and considering the present trend of inflation, 11% increase in DA has been considered during the 6 months period.

Commission's Ruling

The Commission has accepted the actual employee expenses for FY 2008-09 after prudence check, as detailed in Section 3 of this Order. For FY 2009-10 and FY 2010-11, the Commission has allowed employee expenses, based on inflationary trends, as discussed in Section-4 of this Order.

2.17 Operation & Maintenance (O&M) Expenses

Shri Madhusudan Roongta and others submitted that MSEB was un-bundled into three different Utilities for increasing efficiency and to reduce expenses, however, O&M expenses of all the Companies are increasing steeply, which is against the objective of un-bundling. The percentage of O&M expenses in ARR of MSEDCL is higher in comparison to many distribution companies in India. They further submitted that the Commission approved Rs. 3207 Crore as O&M expenses for FY 2009-10, which has been sought to be revised to Rs. 3700 Crore (more than 15% increase) and Rs. 3979 Crore (more than 24% increase) for FY 2009-10 and FY 2010-11, respectively. MSEDCL is spending huge money on Management Information System, Automatic Meter Reading, appointment of franchisees, and many other infrastructure schemes, which should result in reduced O&M expenses, whereas MSEDCL is proposing an increase of 24% in O&M expenses in one year. He requested the Commission not to allow increase in O&M expenses and reduce O&M expenses for future years starting from FY 2010-11 by taking into accounts the benefit projected by MSEDCL while taking approval of capital expenditure schemes in their project reports.

Prayas, Pune submitted that the O&M expenses are increasing with a CAGR of 12% over the last 4 years, which is much higher than the inflation trend, which is generally considered as a benchmark for these costs. It further submitted that MSEDCL does not consider these costs as controllable and hence, never proposes efficiency loss sharing when the costs exceed approved limits. O&M is one of the most predictable expenses of the DISCOM and the Company's inability and unwillingness to control even these costs does not reflect efficient operations.

Gharda Chemicals Limited submitted that actual O&M expenses of MSEDCL in FY 2008-9 exceeded the O&M expenses approved by the Commission in the last APR Order, by around Rs. 325 Crore. It further submitted that by monitoring the expenses on regular basis the expenditure may come down and the impact of consumers may be reduced.

Shri R.B. Goenka of VIA, an authorised Consumer Representative, submitted that O&M expenses should not be passed on directly, and sharing of gains and losses should be done. He further submitted that O&M expenses should be considered on the basis of Performance Based Regulations instead of CAGR or CPI/ WPI based approach so that these expenses are based on the performance of the Utility.

Urja Prabodhan Kendra submitted that O&M expenses as submitted by MSEDCL in the Petition are almost double the O&M expenses approved by the Commission in the previous APR Order.

Ispat Industries Limited suggested that the normative cost approach is the right way to project O&M expenses in order to develop a performance based framework. It further requested the Commission to devise a methodology that takes into account the improvement in efficiency.

Garware Polyester Limited and others submitted that the explanation submitted by MSEDCL regarding increase in employee expenses and A&G expenses shows that no efforts have been put in by MSEDCL to control these expenses. It further requested the

Commission to consider the approved figures in last APR Order while determining revenue gap.

MSEDCL's Response

MSEDCL has not submitted any specific reply to the above objection.

Commission's Ruling

The O&M expenses for FY 2010-11 have been allowed by applying the appropriate inflation indices on the provisionally trued up expenditure for FY 2009-10. The final truing up of the O&M expenses for FY 2009-10 will be undertaken only after the end of the year, once the audited data is submitted to the Commission, and subject to prudence check. The Commission's computations in this regard have been elaborated in Section-4 of this Order.

2.18 Administration & General Expenses

Urja Prabodhan Kendra submitted that Administration and General expenses (A&G expenses) for FY 2008-09 as submitted by MSEDCL in its Petition are higher by 150% as compared to A&G expenses approved by the Commission in the last APR Order. Similarly, for FY 2009-10, A&G expenses for FY 2009-10 as submitted by MSEDCL in its Petition are higher by 50% as compared to A&G expenses as approved by the Commission in last APR Order.

Ispat Industries Limited submitted that conveyance and travel expenses are significantly high, at Rs. 40 Crore, as submitted by MSEDCL in the Petition.

Shri R.B Goenka submitted that MSEDCL has submitted in the Petition that Rs. 96 Crore has been spent on computer expenses and consumer billing. He further submitted that MSEDCL should improve the billing system and submit the explanation of these expenses. He requested the Commission not to pass such expenses under sharing of efficiency losses. He requested the Commission to disallow the legal expenses incurred by MSEDCL to file appeal in Appellate Tribunal against the Order issued by the

Commission, which MSEDCL is recovering from the consumers. Shri Madhusudan Roongta and others submitted that MSEDCL has submitted legal expenses of Rs. 10 Crore. He further submitted that MSEDCL is spending hefty amount on legal fees and filing appeals. Appellate Tribunal of Electricity (ATE) gives decision on most of the appeals in favour of MSEDCL and the Commission has to implement them and consumers are burdened with increase in tariffs. No consumer forum has strong finances to counter MSEDCL by engaging good legal counsels in Delhi before the ATE. He requested the Commission to engage good legal counsels to counter MSEDCL before the ATE and to file Appeal before the Supreme Court for all the Judgments of ATE, which infringes on consumers' interest.

Ispat Industries Limited submitted that MSEDCL has spent Rs. 8 Crore in FY 2008-09 as legal charges, which are significantly high. As regards the increase in the legal charges, the Commission, in its previous APR Order, directed MSEDCL to submit the details of the legal fees on Case-wise basis with the cases won and lost. MSEDCL, in its reply, submitted that it does not maintain such details. Ispat Industries Limited requested the Commission to direct MSEDCL to maintain the details of all the Cases and the respective legal expenses and submit it to the Commission for review.

MSEDCL's Response

MSEDCL submitted that the increase in A&G expenses are not only due to inflation and increase in volume of transactions, but also due to higher expenditure on conveyance and travel, vehicle expenses and computer stationery, etc. MSEDCL further submitted that A&G expenses for FY 2008-09 are as per Audited Accounts, whereas practical estimation has been made for FY 2009-10 and FY 2010-11. MSEDCL submitted the major reasons for increase in A & G expenses as under:

- MSEDCL submitted that three new zones, i.e., Nanded, Jalgaon and Baramati, have become fully operational during the year 2009-10.
- It further submitted that three new Circles, i.e., Nandurbar, Washim and Baramati, have become fully operational during the year 2009-10.
- New divisions and sub-divisions have been created by MSEDCL during FY 2009-10.

- MSEDCL submitted that Damini squad has started operating during FY 2009-10.
- Frequent drives are being taken by MSEDCL to detect theft of power.
- The material procured for various schemes from the Companies/contractors are being inspected by MSEDCL's employees.
- MSEDCL submitted that in order to protect the property and provide adequate security to employees, additional security measures are required, which need extra budget for this specific purpose.
- MSEDCL has considered some new heads in Rent, Rates and Taxes.
- MERC License fee has been categorised by MSEDCL under A&G expenses, which was earlier categorised under Fees & Subscriptions.
- Rent payable to MSEB Holding Company Ltd. has been included in A&G expenses.

MSEDCL also submitted that the legal expenses incurred by it are genuine and legitimate in nature and these expenses are very small as compared to the total expenditure during a financial year. MSEDCL further submitted that its legal expenses are for contesting case against all consumers involved in theft of electricity, filing recovery suits against consumers who are chronic defaulters. Besides this, legal expenses are also incurred in the regulatory process.

Commission's Ruling

The approved A&G expenses for FY 2010-11 have been determined by applying the appropriate inflation indices on the provisionally trued up expenditure for FY 2009-10. The final truing up of the A&G expenditure for FY 2009-10 will be undertaken only after the end of the year, once the audited data is submitted to the Commission, and subject to prudence check. The Commission's computations in this regard on provisional truing up and revised revenue requirement for FY 2009-10 and FY 2010-11, have been elaborated in Section-4 of this Order respectively.

2.19 Repair & Maintenance Expenses

Urja Prabhodan Kendra submitted that R&M expenses as submitted by MSEDCL are higher by more than 100% as compared to the R&M expenses approved by the Commission in the last APR Order.

Shri. Ponrathnam and others submitted that MSEDCL has neither given details of expenditure on R&M nor non-availability of spare components due to change in technology.

Bosch Limited submitted that R&M expenses of MSEDCL have increased by Rs. 126 Crore within a span of 2 years.

Garware Polyester Limited and others submitted that MSEDCL has not given any explanation for considering Rs. 599 Crore as true-up requirement for FY 2008-09 on account of R&M expenses. It requested the Commission not to consider this truing-up requirement while determining tariff for FY 2010-11.

Ispat Industries Limited submitted that MSEDCL should quantify the benefits of R&M expenses towards improving the system.

MSEDCL's Response

MSEDCL submitted that the infrastructure that has been inherited by it needs frequent repairs and maintenance and therefore, the R&M expenditure requirement has gone up very sharply. In FY 2006-07 as well as in FY 2007-08, MSEDCL submitted that it has actually spent more than that approved by the Commission in the Tariff Order, which clearly indicates the need as well as the requirement of such expenditure.

Commission's Ruling

The approved Repair & Maintenance expenses for FY 2010-11 have been determined by applying the appropriate inflation indices on the provisionally trued up expenditure for FY 2009-10. The final truing up of the R & M expenditure for FY 2009-10 will be undertaken only after the end of the year, once the audited data is submitted to the Commission, and subject to prudence check. The Commission's computations in this regard on provisional truing up and revised revenue requirement for FY 2009-10 and FY 2010-11, have been elaborated in Section-4 of this Order respectively.

2.20 Proposal to revise Bhiwandi Tariff

Ulhasnagar Manufacturers Association submitted that power to Bhiwandi franchisee is being given at a fixed rate of Rs. 2.13 per unit and others have to bear the burden of Bhiwandi franchisee. It further submitted that MSEDCL should submit the reason for not proposing revision in tariff of Bhiwandi circle.

MSEDCL's Response

MSEDCL submitted that the tariff levied for Bulk Supply to Bhiwandi Franchisee is governed by the Distribution Franchisee Agreement. However, tariff levied to consumers of Bhiwandi Franchisee is same as applicable to rest of the consumers of Maharashtra.

Commission's Ruling

MSEDCL has submitted that the bulk supply rate for supply to Bhiwandi Franchisee depends on the Base Rate, i.e., is the yearly rate quoted in the Distribution Franchisee Agreement. Since, the Agreement was signed on 26th January 2007, the base rate was Rs. 1.80 per kWh, for the 2nd year Rs. 1.81/kWh, 3rd year Rs. 1.88/kWh and 4th year Rs. 1.95/kWh. The base rate is escalated by the Tariff Index Ratio on a monthly basis, which is computed as given below:

Tariff Index Ratio (TIR) = (ABR for the month) /(Base year ABR)

In its Order dated January 7, 2010 in Case No. 63 of 2009, on the Review Petition filed by MSEDCL, the Commission has directed MSEDCL as under:

> *"g. Hence, MSEDCL is directed to immediately initiate an independent audit of the sales, revenue, ABR, and subsidy claimable, claimed and received from GoM for the period starting from January 2007 onwards till date. Pending the audit review, to partly mitigate MSEDCL's difficulties, an adhoc amount of Rs. 200 crore would be considered at the time of truing up for FY 2009-10. However, if the Audit is completed before the submission of the APR Petition or before March*

1, 2010, and submitted to the Commission, the actual amount would be considered and allowed."

However, MSEDCL is yet to submit the desired Auditor's Report. The Commission hereby reiterates its direction to MSEDCL to submit the Report of the independent audit of the sales, revenue, ABR, and subsidy claimable, claimed and received from GoM for the period starting from January 2007 onwards till date, within 3 months of the date of issue of this Order.

2.21 Provision for bad debts

Shri Madhusudan Roongta and others submitted that the Commission allows 1.5% of revenue as provision for bad debts in the ARR of MSEDCL, whereas most State Electricity Regulatory Commissions do not allow any amount as provision for bad debts as expenditure in the ARR of Distribution Utilities. They further requested the Commission not to allow any provision for bad debts in the ARR of MSEDCL.

TSSIA submitted that MSEDCL has mentioned provision of Rs. 504 Crore for bad debts, which is quite high and should not be allowed by the Commission.

Shri Anil Chavan submitted that every year, provisioning for Bad Debts is made, which is increasing every year. In FY 2008-09, MSEDCL has considered bad debts of Rs. 243 Crore. A list of defaulters should be published for public knowledge through a public notice.

Shri R.B. Goenka submitted that MSEDCL has calculated provision for bad debts by applying CAGR, which is incorrect.

MSEDCL's Response

MSEDCL submitted that the provision for bad debts has been made by MSEDCL in accordance with the principle adopted by the Commission in the Tariff Order for FY 2006-07 dated October 20, 2006. MSEDCL has estimated the provision for bad debts at the rate of 1.5% of revenue requirement for FY 2009-10 and FY 2010-11.

Commission's Ruling

The Commission has allowed provision for bad debts on a normative basis at 1.5% of projected revenue for FY 2009-10 and FY 2010-11, as elaborated in Section 4 of this Order.

2.22 Distribution Loss

Lloyds Steel Industries Limited submitted that MSEDCL has considered distribution loss of 19.98% for FY 2010-11 in the Petition as against distribution loss of 18.2% as approved by the Commission in its Order dated August 17, 2009. MSEDCL's request for reduction of target distribution loss as set by the Commission in the Order dated August 17, 2009 should not be accepted by the Commission. It further submitted that distribution losses are different in different circles and also vary according to the voltage levels (HT or LT) of different consumers, i.e., HT and LT consumers. HT consumers are paying extra charges on account of distribution loss, which is not justified. The distribution losses should be corresponding to the voltage level and losses of the respective circles of consumers.

Vidarbha Chamber of Commerce & Industry submitted that MSEDCL is still using old distribution network. It submitted that the Central Government has formulated a number of schemes under which grants and subsidies are available for improving the quality of transmission/distribution network so that capital expenditure will be substantially reduced. It further requested the Commission to direct MSEDCL to modify their system and bring down the losses well within the limit of 10%. This may increase the revenue of MSEDCL and avoid further increase in tariffs.

Shri. Pratap Hogade, Chief General Secretary, Janata Dal (Secular), Maharashtra submitted that the Commission had directed MSEDCL, in its Order dated August 17, 2009, to reduce the distribution losses by 4 % per annum. Despite this directive, MSEDCL has considered a 'realistic' loss reduction target of 1% for FY 2009-10 and has projected the revised estimate for revenue as Rs. 28794 Crore. He requested the Commission to consider the projected revenue by considering 4% distribution loss reduction, in accordance with the Commission's directives.

Shri Madhusudan Roongta and others requested the Commission to implement 4% distribution loss reduction trajectory for four years upto FY 2010-11 and share the gains and losses among Utility and consumers as per MERC Tariff Regulations.

Shri. Ponrathnam and others submitted that the Commission should allow distribution losses only up to 4%.

Vidarbha Chamber of Commerce and Industry submitted that the system losses are about 21.98% in Maharashtra. It further submitted that MSEDCL in its Petition has stated that the losses are mainly due to theft of energy, which is not the reason for higher distribution losses. It also submitted that MSEDCL has appointed franchisee in Bhiwandi circle and some divisions of Nagpur zone, which has resulted in reduction in distribution loss. It further suggested that MSEDCL should appoint franchisees in more urban divisions to increase the revenue and decrease the distribution loss.

Shri Anil Chavan submitted that T&D loss is a major problem in case of MSEDCL. He suggested the distribution losses should be shown under three sub-heads, i.e., Technical (Transmission from substation to destination and transformers leakage), Commercial (due to metering and non-metering) and Theft (Direct or Indirect). He submitted that MSEDCL should clarify whether the administration machinery is capable of detecting exactly 4% reduction in power losses and 1% thereafter by their own means.

Shri A.R. Bapat submitted that circle-wise distribution losses as submitted by MSEDCL in the Petition are not reliable.

Ispat Industries Limited submitted that MSEDCL has revised the loss projection for FY 2010-11 and filed for a loss reduction of 1% stating that a reduction of 1% is more reasonable as compared to 4%. Ispat Industries Limited requested the Commission to disallow the revision in the loss trajectory as proposed by MSEDCL.

MSEDCL's Response

MSEDCL submitted that it has calculated distribution losses based on Energy Input (Metered) and Energy Output (Billed). The methodology adopted to calculate distribution loss is correct and reliable. It further submitted that energy losses occur in the process of distribution of electricity to consumers due to technical and commercial losses. The technical losses are due to energy dissipated in the conductors and equipment used for transmission, transformation, sub- transmission and distribution of power. These technical losses are inherent in a system and can be reduced to an optimum level. The losses can be further sub-grouped depending upon the stage of power transformation and transmission system, as Transmission Losses (400kV/220kV/132kV/66kV), as Sub transmission losses (33kV /11kV) and Distribution losses (11kV and below). The commercial losses are caused due to theft, pilferage, defective meters, and errors in meter reading. The major reasons for technical losses are large scale rural electrification through long 11kV and LT lines, many stages of transformation, poor quality of equipment used in agricultural pumping in rural areas, cooler, air-conditioners and industrial loads in urban areas.

It further submitted that it will be worthwhile to look at the statistics of the main infrastructure that is being maintained by MSEDCL across the State of Maharashtra. MSEDCL added that it is serving the largest geographical area as compared to any other State Electricity Distribution Company in the Country. Due to its large geographical spread, the length of LT lines is also significantly higher. These LT lines contribute significantly to technical loss. In addition, the LT network is also vulnerable to commercial losses. Due to far flung rural nature of agriculture consumers across the State, non-availability of quality agencies for meter reading and tendency of the consumers not to keep the metering installation in order makes it very difficult task to take meter readings properly. Therefore, comparing MSEDCL with other State Electricity Distribution Companies in other States will not be a fair comparison.

It submitted that it may be appreciated that it has exceeded MYT Trajectory stipulated by the Commission during the first two years of first MYT Control Period. MSEDCL has reduced the distribution losses from opening level of 30.2% in FY 2006-07 to 21.98% in FY 2008-09.

MSEDCL stated various provisions and regulatory practices due to which it has requested the Commission to relax the loss reduction target for FY 2009-10 to 1% instead of 4%. Relevant provisions of Tariff Policy and National Electricity Policy, which provides for relaxation of norms are as follows:

1. National Electricity Policy: Clause 5.8.10 states *"... The State Government would prepare a Five Year Plan with annual milestones to bring down these losses expeditiously. Community participation, effective enforcement, incentives for entities, staff and consumers, and technological up-gradation should form part of campaign efforts for reducing these losses*."

2. Tariff Policy states "…*In cases where the operations have been much below the norms for many previous years the initial starting point in determining the revenue requirement and the improvement trajectories should be recognized at "relaxed levels" and not on "desired levels". Suitable benchmarking studies may be conducted to establish the "desired" performance standards. Separate studies may be required to assess the capital expenditure necessary to meet the minimum service standards*".

3. Appellate Tribunal observations in Appeal No. 90 of 2007: Reliance Energy limited vs. MERC

   "…*Considering that the losses must be reduced further and keeping in mind the practical difficulties regarding the mechanical meters and theft of electricity in unorganized areas, till such time the technical studies are carried out, the target of losses during the year 2007-08 be retained at the level of 12.1% as proposed by the appellant in its petition*…".

4. The Abraham Committee Report on "Restructuring of APDRP" has provided a strategy for AT&C loss reduction, as under:

   The Task Force recommends following targets for reduction in AT&C losses by the Utilities:

   i) Utilities having AT&C losses above 40%: Reduction by 4% per year;
   ii) Utilities having AT&C losses between 30 & 40%: Reduction by 3% per year;
   iii) Utilities having AT&C losses between 20 & 30%: Reduction by 2% per year;
   iv) Utilities having AT&C losses below 20%: Reduction by 1% per year.

MSEDCL further submitted that distribution loss reduction on year-on-year basis should follow a similar strategy, i.e., not more than 10% of the prevailing losses. Since the present distribution loss falls in the range of 20% and 30% (21.98%), that too on lower side of the bracket so, the loss reduction target should be in between 1% to 2% .

Commission's Ruling

The computation of actual distribution losses in FY 2008-09, computation of efficiency gains on this account, and the sharing of the same between MSEDCL and the consumers have been elaborated in Section 3 of this Order.

For FY 2009-10, the Commission has retained the target distribution loss level as 4%, and the impact of the difference between the actual distribution loss and the target distribution loss, would be addressed at the time of truing up based on actuals and prudence check. For FY 2010-11, the Commission has considered a distribution loss reduction target of 1% for estimating the energy input requirement. The Commission's detailed analysis and ruling on the issue of distribution loss to be considered for FY 2010-11 has been elaborated in Section 4 of this Order.

2.23 Average cost of supply

Shri Madhusudan Roongta and others submitted that Average Cost of Supply plays an important role in determination of tariffs to the consumers. The average cost of supply of distribution Ccompanies in Maharashtra are the highest in India. Being an industrially progressive and developed State, Maharashtra should have lowest electricity tariff in India, however, average cost of supply of all the distribution Companies in Maharashtra is increasing every year, leading to imposition of highest tariff particularly to the industrial consumers. MSEDCL should function efficiently and strive towards reducing cost of supply of power.

TBIA submitted that MSEDCL has projected steep increase in Average Cost of Supply on account of abnormal increase in fixed expenses, which are controllable factors, and should not be allowed according to the provisions of MERC Tariff Regulations.

MSEDCL should control expenditure and improve efficiency and should follow the provisions of Electricity Act, 2003 and Tariff Policy. He requested the Commission not to allow any kind of expenses more than that determined in MYT Order except power purchase expenses and transmission charges otherwise, the basic purpose of implementation of MYT will not be achieved.

MSEDCL's Response

MSEDCL submitted that the total revenue gap after considering revenue shortfall for FY 2008-09 is Rs 4166 crore, which requires an average increase of 14% over the existing tariff. MSEDCL submitted that the projected revenue gap has to be recovered to maintain viability of business.

MSEDCL further submitted that this tariff increase would have been higher, had the distribution losses not been reduced by MSEDCL to the present levels. Further, the tariff increase requirement on account of estimated revenue gap in FY 2010-11 is mainly attributable to increase in power purchase expenses, including transmission charges.

MSEDCL added that power purchase expenses including transmission cost constitutes about 75 to 80% of Revenue Requirement over which it has no control. Power Purchase expenses have increased from Rs. 19793 Crore in FY 2008-09 to Rs. 27657 Crore in FY 2010-11, i.e., it has increased by about Rs. 7864 Crore.

MSEDCL submitted that Average Cost of Supply has increased by 12% in FY 2010-11 as compared to Average Cost of Supply approved by the Commission for FY 2009-10.

MSEDCL further submitted that based on reasons and facts stated above, it is compelled to propose increase in tariff in order to serve its customers better along with supplying reliable and quality power.

Commission's Ruling

The Commission has analysed each head of expense and revenue mentioned by MSEDCL, and its treatment as well as the final truing up for FY 2008-09 has been elaborated in Section 3 of this Order, while the provisional truing up for FY 2009-10 and determination of ARR and tariff for FY 2010-11, has been elaborated in Section 4 of this Order. The average tariff increase allowed by the Commission is significantly lower than that sought by MSEDCL.

2.24 Un-metered Consumers

Shri A.R. Bapat submitted that according to Section 55 of EA 2003, all consumers should get metered supply. He further submitted that MSEDCL has submitted in the Petition that out of 26 Lakh agricultural connections, 14.62 Lakh are unmetered agricultural connections (up to December 2008). He submitted that Section 55 (3) empowers the Commission to levy penalty, which works out to Rs. 24 Lakh per year.

Prayas Energy Group, Pune submitted that metering efficacy can be evaluated at three levels:

Consumer metering: As per MSEDCL's submission, percentage of zero/average/faulty consumption of residential, commercial and industrial consumers is 15.45%. Leaving aside half of MSEDCL's agricultural consumers, who are still unmetered, it is very disturbing to note that MSEDCL is not even able to properly meter and bill its residential, commercial and industrial consumers, and claims that it is difficult to reduce losses further.

Distribution transformer metering: The project for 100% distribution transformer metering has been initiated since 2003, however, till today, only 55% DTs have been metered. Even today, reliable data for energy auditing and accounting at DT level is not available.

11 kV Feeder AMR metering: For improving accuracy in loss estimation and better tracking of load shedding, it was proposed to install meters with Automatic Meter Reading (AMR) facility on all 11KV feeders. The project DPR was approved in Feb 2007 and amount of Rs.48 Cr was approved. However, till date only Rs.1.29 Crore has been spent on renting premises at Pune for this project but no real progress has taken place.

Prayas further submitted that MSEDCL has not taken sufficient measures to improve its metering efficacy. Inability to undertake metering at system level (DT and 11 kV Feeders) shows the Utility's unwillingness to improve its performance in this respect.

MSEDCL's Response

MSEDCL submitted that Section 55 of EA 2003 states that supply should be given through correct meter only. It further submitted that it is not energising any new connection without meter. MSEDCL submitted that it is only the old unmetered connections, which is required to be metered.

MSEDCL submitted that it is taking all possible measures to convert un-metered connections into metered connections. MSEDCL submitted that it has installed more than 1.2 Lakh meters per annum from last few years to achieve the target. It has recently procured 25 Lakh meters in order to convert un-metered connections to metered connections.

Commission's Ruling

The Commission is concerned about the lack of significant progress on this aspect, despite repeated directives in this regard given by the Commission. The Commission will address this issue as a part of its compliance monitoring process, and take appropriate action in this regard.

2.25 Reliability Charges

Bharatiya Udhami Avam Upbhokta Sangh (BUAUS) submitted that Reliability Charges should not be allowed in addition to the tariff rate.

MSEDCL's Response

MSEDCL submitted that Reliability Charges are being levied only for consumers situated in specific areas, where Zero Load Shedding is implemented. MSEDCL further submitted that the issue of Reliability Charges/Additional Surcharge may not be addressed in APR Petition of FY 2009-10 as it does not deal with the issue involving Zero Load Shedding.

Commission's Ruling

The Commission has elaborated its rationale for levying Reliability Charges in areas where the Zero Load Shedding scheme has been implemented, in its various Orders issued in the matter.

2.26 wheeling charges

Shri Ponrathnam submitted that wheeling charges increase with decrease in voltages. MSEDCL should provide the details of the calculation of wheeling charges as Rs. 1.00 per kWh at 33 kV, Rs. 1.34 per kWh at 11 kV, and Rs. 0.57 per kWh at LT, as proposed in the Petition.

Maharashtra Elektrosmelt Limited submitted that increase in wheeling charges as proposed by MSEDCL should not be allowed. It further submitted that the wheeling charges should be reduced by 50% and the losses at 22 kV level should be reduced to 6% by clubbing it with 22 kV level.

Pudumjee Pulp & Paper Mills Limited submitted that MSEDCL has proposed to increase the wheeling charges for 22 kV feeders from 25 Paise per Unit to 134 Paise per Unit. It further requested the Commission to ignore this proposal of MSEDCL.

Bajaj Finserv Limited submitted that wheeling charges should not be made applicable to the EHV open access consumers as they draw power directly through transmission system. It further requested the Commission to maintain the earlier procedure of determination of wheeling charges based on Rs./kW/Month similar to transmission charges. Bajaj Finserv Limited submitted that the Commission should consider 12% wire cost with respect to ARR instead of 14% as proposed by MSEDCL, in absence of voltage-wise segregated realistic "Wire cost" component of MSEDCL's ARR in FY 2010-11.

MSEDCL's Response

MSEDCL submitted that it has applied the same ratio of Network and supply cost segregation as approved by the Commission in its MYT order dated May 18, 2007. The Commission has accepted the percentage as submitted by MSEDCL for segregation of ARR into Wire and Supply business in APR Order dated August 17, 2009 (Case No. 116 of 2008). MSEDCL reproduced the Commission's ruling in APR Order dated August 17,2009, as reproduced below:

"The Commission has determined the wheeling charges for 33 kV, 22 kV/11 kV and LT level, based on the allocation of asset base and considering sales at respective voltage levels. <u>The ARR has been segregated between wheeling business and retail supply business based on the submissions made by MSEDCL.</u>" ***Emphasis added***

MSEDCL submitted that depending on cost estimates for FY 2010-11, the overall percentage of Wire and Supply will vary and hence, it will not necessarily be 12% as per previous segregation. MSEDCL estimated wires cost as 14% of total ARR. MSEDCL submitted that it has proposed wheeling charges and losses in accordance with methodology proposed by it in previous Petitions and approval granted by the Commission. MSEDCL submitted that it does not maintain audited accounts for voltage-wise assets. However, based on engineering estimate of its assets, it has arrived at the segregation. It submitted that it does not have segregation between GFA of 22/11 kV level and LT level assets. Hence, losses of 9% and 20.98% have been considered.

Commission's Ruling

The Commission, in its earlier Order, had directed MSEDCL to maintain separate accounting for wires and supply business. However, no data in this regard has been submitted to the Commission. Hence, in the absence of accounting information for wire related costs, the Commission has considered allocation of various cost components of Aggregate Revenue Requirement (ARR) between network related costs and supply related costs, in line with the principles outlined under MYT Order for MSEDCL. The computation for wheeling charge has been elaborated in **Section 5** of this Order.

2.27 Cross Subsidy

Kalyan Ambernath Manufacturers Association (KAMA) and others submitted that MSEDCL should follow the provisions related to cross subsidy reduction in accordance with EA 2003. KAMA further requested the Commission to implement the provision of cross subsidy in accordance with EA 2003.

Shri. Ponrathnam submitted that the Commission should advise the State Government to directly help poor people with subsidy through a separate fund, to eliminate or reduce cross subsidy in accordance with Section 65 of EA 2003, Sections 8.3 and 8.2 (3) of Tariff Policy and other Regulations. It further submitted that State Government should be asked to pay the complete amount of subsidy.

R.L. Steels Limited submitted that the industrial consumers are always in subsidizing group and are always charged at a rate higher than the average cost of supply. Therefore, hike in their tariff should be lowest so as to reduce the cross-subsidy and to flatten the curve as envisaged by the Commission.

Ispat Industries Limited submitted that the Commission should devise a road-map at the beginning of the next Control Period outlining the amount of reduction and levels of cross-subsidisation for the next 5 years. Further, Ispat Industries Limited added that the State Government should pay subsidy directly to the consumers.

Shri R.B. Goenka submitted that the categorisation as proposed by MSEDCL will increase the cross subsidy. He further submitted the Commission should make a road map to reduce the cross subsidy and till the time this road map is completed, the proposed tariffs should not be considered.

Shri A.R. Bapat submitted that MSEDCL has not submitted any data on cross subsidy reduction as given by TPC-D and BEST in the Petition.

MSEDCL's Response

MSEDCL submitted that the process of finalizing the road map for cross-subsidy reduction is in the initial stage and the cross subsidy reduction road map can be formulated only after due consultation with all stakeholders. MSEDCL added that the cross subsidy is directly linked to the Aggregate Revenue Requirement, which in turn is directly impacted by various uncontrollable factors and all these issues need to be looked into while deciding the tariffs for various categories.

MSEDCL submitted that the Commission is yet to finalise the road map for cross-subsidy reduction and hence, MSEDCL is unable to make any comments on the same.

Commission's Ruling

For the information of the consumers, in Section 5 of this Order, the Commission has computed the prevailing level of cross-subsidy and the cross-subsidy reduction based on the revised tariffs. The Commission has also separately initiated a consultative process for formulating the roadmap for cross-subsidy reduction.

2.28 Purpose of MYT

TBIA submitted that the whole purpose of introducing Multi Year Tariff (MYT) regime was that it will bring in some certainty in tariff changes and give Utilities sufficient time to plan operations well and reduce cost of inefficiencies. The experience of MYT regime shows complete failure on account of Utility and the Commission to achieve any certainty in tariff changes. It also submitted that MYT framework is meant for performance review and not drastic hike in tariff, which gives tariff shock to the consumers.

R.L. Steels Limited submitted that the period between two successive tariffs is decreasing day by day, particularly after the introduction of MYT system.

MSEDCL's Response

MSEDCL submitted that the present petition for Annual Performance Review of FY 2009-10 has been filed as per Clause 17.1 and 17.3 of the MERC Tariff Regulations.

MSEDCL further submitted that the Tariff Petition has been submitted in line with the Commission's directions and Regulations framed by the Commission, and there is no deliberate attempt to reduce/increase the period between two successive Tariff Petitions. MSEDCL submitted that the tariff increase pertaining to RGPPL and MSPGCL were emanating from various Judgments/Order which caused an exceptional circumstance for revision of tariff. MSEDCL submitted that the Commission has directed MSEDCL to recover the amount through additional charge and pay the amount to RGPPL and MSPGCL. It further submitted that it is only collecting the amount and giving to the generation companies and MSEDCL is not responsible for the increase in tariff. As regards the Review Order dated January 7, 2010, no revision has happened on this account, and the impact of the same has been proposed to be recovered in the tariff of FY 2010-11.

Commission's Ruling

The Commission has undertaken the present exercise of Annual Performance Review of FY 2009-10 and tariff determination for FY 2010-11 under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003) and all other powers enabling it in this behalf. The Commission has analysed each head of expense and revenue sought by MSEDCL, and has determined the revenue requirement to be passed on to the consumers after applying prudence check.

2.29 Re-categorisation of consumers

Nag Vidarbha Builders Association submitted that the Commission, vide its Order, dated August 17, 2009 (Case No. 116 of 2008) directed that the connections granted for the purpose of construction activities may be categorised under LT-II Tariff category instead of temporary connection. However, MSEDCL issued the required Circular in November 2009 (after 3 months). MSEDCL, in the Petition, has again proposed to categorise the construction activities under temporary connection. It requested the Commission not to accept the proposal of MSEDCL for change of category and tariff.

TBIA proposed that environment-friendly projects like Common Effluent Treatment Plant and Hazardous Waste Management Plant, which have been deemed as Public Utility even by the High Court may be treated in the same manner as Municipal Water

Works and other Public Utility Organisation. TBIA also requested the Commission to direct MSEDCL to charge HT Industrial tariff for industry related activities including R&D, canteen and such other activities at the earliest, as large number of industries in Maharashtra have been affected by change of category for electricity consumption from Industry to Commercial category for part of their consumption.

Thane Small Scale Industries Association (TSSIA) suggested that for Micro, Small and Medium Enterprises (MSME), there must be a special category like in the case of farmers, power looms etc., and concessional rates should apply for this category.

Kalyan Ambernath Manufacturers Association and others submitted that every industry, particularly micro and small, cannot afford to have R&D laboratories and therefore, it has to be outsourced. It further requested the Commission to include all such industry related services like R&D under Industrial category, as they have been formally recognised as industry under Small Scale Service & Business Enterprise (SSSBE) by Government of India.

Laghu Udyojak Sangh submitted that seasonal tariff should be at par with that for HT-I category.

Tata Metaliks Limited submitted that MSEDCL is supplying power to it at 33 kV feeder and billing is done under HT-I Industry, which is for express feeder. It further requested the Commission to direct MSEDCL to change the billing category from HT-I to HT-II.

Maharashtra State Cooperative Textile Federation Limited requested the Commission to treat the cooperative spinning mills in the same manner as given to power loom industry.

Shri Balaji Fibres submitted that MSEDCL is not allowing Ginning Pressing Unit to shift from seasonal HT to HT I non-continuous seasonal (not on express feeder). It further submitted that consumer should be given an option to opt for any tariff of his choice.

Akhil Bharatiya Grahak Panchyat suggested that a separate category covering the LT Flour Mills, LT Power looms and LT Cold Storage should be created.

Nashik Municipal Corporation submitted that MSEDCL is charging Government Hospitals as per Commercial Tariff category, which should be modified from commercial to concessional tariff category. It also submitted that street lighting load is mainly used during the night hours, i.e., during off-peak time. For other categories, concession of Rs.

0.75 per Unit is offered in TOD tariff, similar concession for street lightning category should be considered. It also submitted that tariff rates for PWW and Sewage Treatment Plants should be at par with agriculture tariff.

K.E.M Hospital requested the Commission to re-categorise the hospital (presently categorised under HT-II Commercial) under HT Industry (Non-express Feeder).

The Association of Hospitals and others submitted that all the charitable hospitals render yeoman service to the Society and general public and play a vital role in supplementing the Governmental facilities for health care. They are presently categorised under LT-II commercial category, which adversely affects their ability to provide quality service, while the professionals like Lawyers, Doctors, professional Engineer, Chartered Accountant, etc., using their residences and electricity for their professional activity are covered under LT-I Category. It further submitted that it will be unfair to treat the Public Charitable Trust Hospitals in the same class of consumers of electricity like shopping malls, multiplexes, cinema halls, theatres, etc., and even Section 62 (3) of Electricity Act, 2003 contemplates differential treatment of consumers based on the purpose for which supply is required. It requested that there should be a separate concessional category for charitable hospitals.

Sandip Foundation submitted that educational institutes are not running to earn profit, so operation of the educational institutes is not a commercial activity. The tariff of educational institutes should not be equated with other commercial establishments like shopping malls, theatres, etc., and electricity tariff for educational categories may be determined lower than that for the industrial category.

Mahavir Jaina Mahavidyalaya submitted that it is presently charged under HT-II Commercial Category, and requested the Commission to re-categorise it under HT-VI Grouping Housing Society or LT-I Domestic category.

Software Exporters Association of Pune (SEAP), BSNL, Tata Teleservices and others requested the Commission to ignore the prayer of MSEDCL to re-categorise IT/ ITES Industry from Industrial to Commercial category. It has further requested the Commission to categorise Software R&D and Product Testing Units under Industrial category.

Bharat Forge submitted that MSEDCL's present tariff structure is only framed for high and low voltage categories. There is no separate category for EHV consumers and such consumers are classified under HT Category.

Maharashtra Jeevan Pradhikaran submitted that due to increase in tariffs, electricity expenditure has increased the Operation & Maintenance Cost of drinking water supply schemes. It further requested that the tariff for water supply schemes should be framed without any category, i.e., common for both HT/ LT metering and it should not be more than 100 Paise per unit and Rs. 15 per month as kVA charges.

Blackhill Investments Private Limited submitted that it should be categorised under HT-VI Residential instead of HT-I category.

Deepak Fertilisers and Petrochemicals Corporation Limited submitted that it should be classified as HT- I Industrial category instead of HT-II Commercial category.

MSEDCL's Response

MSEDCL submitted that the Commission has already examined this issue and has given appropriate classification vide its Order dated December 30, 2009 (Case No. 31 of 2009).

> *"It is further clarified that the 'commercial' category actually refers to all categories using electricity for 'non-residential, non-industrial' purpose, or which have not been classified under any other specific category. For instance, all office establishments (whether Government or private), hospitals, educational institutions, airports, bus-stands, multiplexes, shopping malls, small and big stores, automobile showrooms, etc., are covered under this categorization. Clearly, they cannot be termed as residential or industrial. As regards the documents submitted by the Petitioners to justify their contention that they are 'Charitable Institutions', the same are not germane to the issue here, since the Electricity Act, 2003 does not permit any differentiation on the basis of the ownership."*

MSEDCL submitted that the reduction of fixed charges may not be correct for some categories like HT-I Industries (Express feeder), HT PWW (Express feeder), etc., that are exempted from load shedding. Similarly, in case of HT Industries (Non-express feeder) and HT-PWW (Non-express feeder) consumers are subjected to limited duration of load shedding and during the remaining period, these consumers are provided regular supply of power. MSEDCL added that the Commission's decision to reduce the fixed charges defeats the principle laid down in the Tariff Order dated May 5, 2000, where the Commission ruled that the fixed costs should be recovered through the fixed charges and observed that the fixed charged component of tariff needs to be gradually increased.

As regard IT/ ITES Industries, MSEDCL submitted that as per Tariff Order in Case No. 72 of 2007 dated June 20, 2008, LT- II Non domestic Tariff is applicable to power supply used for appliances like lights, Fans, Refrigerators, Heaters, Small Cookers, Radios, TV Sets, Battery Charger Equipment, X-ray machines, Small Motors up to 1HP attached to appliances and Water Pumps. This clearly indicates that the applicability of tariff is depending upon the purpose of usage of Electric supply.

MSEDCL further submitted that according to IT & ITES Policy 2003, Industrial Tariff is applicable to the activities covered under IT and IT Enabled Services. However, usage of some activities is commercial in nature. Some of the activities, which are of such types are as below:

a. Computerized call centres:

b. Geographical Information System mapping & services

c. E-mail/ Internet fax provider

d. Computer system AMC holder

e. IT Solution Providers / Implementers (such as and including Server/data banks, Application Service Providers, Internet /Web-based e-commerce service providers, Smart Card customization service providers, systems integration service providers)

f. Cyber Café /Cyber Kiosk/Cyber Parlours and Video Conferencing Centres /Parlours

g. Back Office Operations relating to computerized data

h. BSNL activity and the mobile based communication (GPRS &CDMA) and its allied cell sites (Towers)

MSEDCL further submitted that it is essential to review the activities eligible for registration as IT services & IT enabled services in IT & ITES Policy, as these activities will be eligible for industrial tariff as against their commercial activity.

MSEDCL also submitted that the Mobile Towers are not declared under IT Policy to be Industries. Hence MSEDCL has proposed that the Mobile towers be classified under commercial categories.

Commission's Ruling

The Commission has deliberated at length in Section 5 of this Order on the tariff philosophy adopted by the Commission and the Commission's rulings on various tariff philosophy proposals made by MSEDCL in its APR Petition have also been elaborated in Section 5 of this Order.

2.30 Change of Consultant of the Commission

During the public hearings, Prayas Energy Group and several other objectors submitted that such a prayer in a tariff determination process would not be admissible.

The Miraj Advocates Bar Association and others submitted as under:

> *"Vide clause (b) the petitioner has surprisingly made a very strange prayer exceeding his limits. Who should be the Regulatory Expert is the exclusive concern of the Hon'ble Commission. And the petitioner has nor locus whatsoever to make such a prayer. The Hon'ble Commission should not only reject this prayer but should take a very serious note of this, otherwise in next Tariff proposal the petitioner may come with a prayer that Regulatory expert be appointed after taking consent/ approval from the petitioner."*

MSEDCL's Response

MSEDCL has not submitted any reply to the above objection

Commission's Ruling

The Commission is of the view that such a relief cannot be sought by the distribution licensee as part of the tariff determination process. Further, appointment of Consultant/Regulatory Expert by the Commission for providing expert advice to the Commission in its activities is the exclusive prerogative of the Commission. In any case, the experts or Consultants provide only analysis and help in the process and it is the Commission, which has to take a view in each and every aspect of the final outcome and the Orders it issues. The Commission reiterates its full faith in the ability and credibility of its Consultants/Regulatory Experts.

2.31 Tariff Philosophy

Shri. Madhusudan Roongta and several others submitted that since FY 2003-04, the Commission has given directions to MSEDCL on several occasions to provide data for implementing voltage level tariffs. However, MSEDCL has never submitted the required data. They requested the Commission to implement voltage-wise tariffs, based on available feeder level data, in the Tariff Order.

They also suggested that there should be only four consumer categories, viz.,

- agriculture consumers whose tariff should be lowest,
- industrial consumers whose tariff should be higher than that for agriculture consumers but lower than that for other categories,
- commercial consumers whose tariff should be higher than that for agriculture consumers and lower than that for residential consumers, and
- residential consumers, whose tariff should be the highest.

Shri. N. Ponrathnam, authorised Consumer Representative, submitted that the Commission should approve tariffs that reflect the cost of electricity in accordance with Section 62 (3) of the EA 2003. If the Commission is not able to differentiate between consumers in accordance with Section 62 (3) of the EA 2003, then there should not be any differentiation. However, if the Commission is able to differentiate between consumers in accordance with Section 62 (3) of the EA 2003, then different categories should be created and the rationale should be clearly explained. He also submitted that the tariff schedule proposed by MSEDCL is arbitrary and does not comply with the EA 2003, Tariff Policy, and MERC Tariff Regulations.

Akhil Bharatiya Grahak Panchyat (ABGP) submitted that MSEDCL has proposed to retain the tariffs of Government owned and/or aided educational institutions at the existing level. ABGP further submitted that if other consumers are going to subsidise the Government owned and/or aided educational institutions, then this proposal of MSEDCL should not be accepted. ABGP added that Malls, Multiplexes, Railways, Advertisers, Builders, Big shopping complexes, Temporary connections for exhibitions, etc., make huge profits and hence, should be asked to pay higher tariffs.

TBIA submitted that the industries are being unduly burdened on account of the approach of determining tariffs by considering higher quantum and cost of power purchase, to make up for the higher transmission loss and distribution losses.

Tata Metaliks Limited submitted that the tariffs should be linked to availability of power to various consumer categories. Sandip Foundation requested the Commission to reduce the number of categories and reject MSEDCL's proposal for creation of additional category.

Mula Pravara Electric Co-operative Society (MPECS) suggested that a comparison should be made with the identical adjoining area of MSEDCL, in order to determine the revenue from MPECS by considering retail supply tariff of MPECS at par with that of MSEDCL and accordingly net revenue realisation based BST should be fixed for MPECS.

Shri S.N. Singh, Chief Electrical Distribution Engineer, Railways submitted that the existing traction tariff for the Railways should be reduced to a reasonable level by taking into account the MSEDCL's cost of supply. He further requested the Commission to continue rebates/discounts at present level and to ensure that RLC and ASC are refund. He also requested the Commission to waive off levy of Reliability Charges and FAC for Railways.

Tata Motors Limited (TML) submitted that Time of Day (TOD) tariffs should be made more attractive by MSEDCL for flattening the demand. TML added that industrial tariff for consumers connected at EHV level should be at least 20% lower than the HT industrial tariff.

Bajaj Finserv Limited (BFL) submitted that open access consumers are HT consumers and LT tariff should not be applicable to them for drawal of energy.

MSEDCL's Response

MSEDCL submitted that it has not suggested any new category in its tariff proposal in the APR Petition for FY 2009-10. MSEDCL added that it has suggested a sub-categorization of the LT II/ HT II Commercial category, in accordance with the representation made by such institutions. MSEDCL has proposed to bifurcate HT-II/LT-II Commercial categories into Commercial (Govt. Aided institutes) and Commercial (other than Govt. Aided), and the tariff of Govt. Aided institutes has been retained at the existing level.

As regards the objection of Bajaj Finserv Limited, MSEDCL submitted that it is a specific relief sought from the Commission, which does not fall under the purview of MERC Tariff Regulations. However, MSEDCL will abide by the directions of the Commission in this regard.

Commission's Ruling

The Commission has deliberated at length in Section 5 of this Order on the tariff philosophy adopted by the Commission and the Commission's rulings on various tariff philosophy proposals made by MSEDCL in its APR Petition have also been elaborated in Section 5 of this Order.

2.32 Regulatory Liability Charges

Shri NV Ghodake from Lloyd Steel Industries Limited submitted that MSEDCL has recovered approximately Rs. 3220 Crore from consumers between December 2003 and October 2006 as interest free loan, in the name of Regulatory Liability Charges (RLC). Out of this, MSEDCL had refunded Rs. 500 Crore in FY 2008-09 and Rs. 676 Crore in FY 2009-10 and balance amount is around Rs. 2000 Crore. Shri. Ghodake and Shri.

Madhusudan Roongta submitted that MSEDCL has not considered RLC refund for FY 2010-11. They added that since this is an interest free loan and lying with MSEDCL since December 2003, provision should be made for refund of at least Rs. 1000 Crore per year so that balance amount of RLC can be refunded within 2 years.

R.L. Steels Limited submitted that out of Rs. 1432 Crore of excess recovered Additional Supply Charges (ASC), only Rs. 659 Crore has been refunded and therefore, provision must be made to refund the balance amount.

Shri. Pratap Hogade, Chief General Secretary, Janata Dal (Secular), Maharashtra submitted that in the previous APR Order, the provision of Rs. 500 Crore and Rs. 592 Crore has been made against RLC refund and ASC refund, respectively. However, MSEDCL has not made any provision for RLC and ASC in its APR Petition for FY 2009-10.

MSEDCL's Response

MSEDCL submitted that the Commission introduced Regulatory Liability Charge in the Tariff Order issued in December 2003. The refund through tariff mechanism has started from June 2008. This refund was pursuant to the decision of the APTEL and the subsequent decision of the Commission. APTEL prima-facie accepted the contention of MSEDCL and had directed the Commission to review / reconsider its decision. As has been directed, MSEDCL has refunded an amount of 500 Crore for FY 2008-09 and an amount of 676 Crore for FY 2009-10.

MSEDCL further submitted that the last two years have seen an explosion in the rates of primary fuel and hence, there has been a steep increase in the power purchase cost. This steep increase has resulted in higher tariff for the consumers, since almost 80% of the ARR pertains to power purchase cost and transmission cost. The RLC refund has to be met through the tariff mechanism and the same needs to be recovered from consumers, which is then subsequently refunded to select group of consumers namely Commercial and Industrial, which are both subsidising categories. In view of the above background and the necessity of reducing the impact of tariff, it had not projected any RLC refund for FY 2010-11.

As regards ASC refund, MSEDCL submitted that it had filed a separate Petition for the determination of ASC refund amount before the Commission in FY 2009-10 and the Commission issued an Order in Case No. 144 of 2008 in this regard. MSEDCL submitted that ASC will be refunded in accordance with the methodology prescribed in Case No.144 of 2008. MSEDCL further submitted that it will continue refund of ASC till the approved amount of Rs. 592 crore is exhausted and after that, it will stop refund of ASC and approach the Commission for providing appropriate mechanism of refund of balance amount of ASC along with a proper provision for compensation.

Commission's Ruling

Keeping in view the sentiments of the concerned consumers in this regard, the Commission has ruled that the RLC amount has to be refunded to the relevant consumer categories and the amount of Rs. 500 crore for RLC refund has been considered for FY 2010-11.

2.33 Controllable and Uncontrollable expenses

Shri. Pratap Hogade, Chief General Secretary, Janata Dal (Secular), Maharashtra submitted that MSEDCL has considered almost all the expenses as Uncontrollable expenses. He requested the Commission to consider and analyse only uncontrollable expenses of MSEDCL and the controllable expenses should be disallowed in totality.

Prayas Energy Group, Pune submitted that MSEDCL considers distribution loss as a controllable parameter only for sharing of efficiency gains. For achievement of distribution losses 0.2% lower than the target set by the Commission, MSEDCL has considered Rs. 66 Crore towards sharing of gains, however, while proposing only 1% loss reduction target for FY 2009-10, MSEDCL has not considered any sharing of efficiency losses.

Shri Anil Chavan submitted that every year, MSEDCL shows higher expenditure for every head as against that approved by the Commission by defining it as an uncontrollable factor and demands truing-up. He further submitted that it is observed that whenever the decision of the Commission is not in favour of MSEDCL, it approached Appellate Tribunal of Electricity (ATE) at public cost. He requested the Commission to review the truing-up system.

Shri R.B. Goenka submitted that MSEDCL has submitted that all expenses are uncontrollable and it is not following the Commission's MYT Order. He further submitted that in MERC Tariff Regulations, the segregation of controllable and uncontrollable factors is not clear while in other States the segregation of controllable and uncontrollable factors has been clearly given. He further suggested that the Commission should issue guidelines, which clearly segregate controllable and uncontrollable expenses.

MSEDCL's Response

MSEDCL submitted that the expenditure incurred by MSEDCL during FY 2008-09 is duly audited by Auditors and is legitimate and genuine and reasons for the same have been outlined in the Petition. MSEDCL further submitted that the Commission has approved the cost for FY 2009-10 by using inflation factors on the basis of revised estimate for FY 2008-09 as submitted in APR Petition of FY 2007-08. Considering only inflationary increase in expenses and ignoring practical and unforeseen expenses and terming the same under "controllable expenses" to allow only partial expenditure will have direct bearing on the cash flows of MSEDCL. The expenditure of MSEDCL is increasing due to many reasons beyond the control of MSEDCL.

Commission's Ruling

The Commission's treatment of each head of expense and revenue, as well as the truing up for FY 2008-09, based on audited numbers and prudence check, has been elaborated in Section 3 of this Order. The Commission has also undertaken sharing of efficiency gains and losses for FY 2008-09 for controllable factors, which has been elaborated in Section 3 of this Order.

2.34 Incentives

Maharashtra State Cooperative Textile Federation Limited suggested that load factor/ P.F. Incentive and TOD tariff incentives should be continued for all consumers.

Supreme Green Energy Solutions Private Limited suggested the implementation of various incentives including Specific energy consumption incentive, Load Factor incentive, Insulation and loss leakage incentive and Solar Inverter Incentive. It also suggested to encourage Distributed Power Generation.

Ispat Industries Limited submitted that at present there is a cap of 15% on the load factor incentive on the energy charges as compared to 25% in AP and the applicability of incentive form a load factor of 40 % itself. It further requested the Commission to consider such incentives and specify similar incentives.

MSEDCL's Response

MSEDCL submitted that it has not proposed removal of load factor/P.F incentives and TOD tariff incentives in its Petition filed under Case No. 111 of 2009.

Commission's Ruling

The Commission agrees with the views of the consumers and as in the past, has retained the incentives and disincentives for different consumer categories at the same level as in the previous APR Order, as elaborated in Section 5 of this Order.

2.35 Definition of Billing Demand

Maharashtra Elektrosmelt Limited suggested that the definition of Billing Demand should be changed for the consumers who have Captive Power Plant (CPP), and may be suitably modified so that these consumers get some incentive from MSEDCL, as such consumers contribute to decrease in demand.

MSEDCL's Response

MSEDCL submitted that the matter is not pertaining to the present APR Petition. However, it will abide by the Commission's direction in this regard.

Commission's Ruling

Maharashtra Elektrosmelt Limited also filed a Petition before the Commission to seek clarification on definition of billing demand for consumers with CPP, who are governed by the Commission's Order in Case Nos. 55 & 56 of 2003 read with MERC Order in Case No.116 of 2008 and the applicability of Load Factor Incentive to consumers with CPP. The Commission has already disposed off the Petition through its Order dated July 19, 2010 (Case No. 12 of 2010) and ruled as under:

> ***"10. Clarification sought by the Petitioner:-***
>
> *The Commission in its Order in Case No.116 of 2008, (Pg. No.241 of 249) has clarified definition of Load Factor and Billing Demand. In accordance with this definition, in case the billing demand exceeds the contract demand in any particular month, then the Load Factor Incentive will not be payable in that month.*
>
> *The billing demand definition excludes the demand recorded during the non-peak hours, i.e.22.00 Hrs. to 6.00 Hrs. and therefore, even if the maximum demand exceeds the contract demand in that duration, Load Factor Incentive would be applicable. However, in this particular case, maximum billing demand has not occurred during 22.00 Hrs. to 6.00 Hrs., and hence the consumer is not eligible for Load Factor Incentive, since recorded billing demand has been in excess of Contract Demand of 43000 kVA.*
>
> *It is pertinent to note that the Stand-by demand component is not mentioned in the definition of 'Contract Demand' as mentioned in Case No.116 of 2008. (Pg. No.245) and hence the relief sought by the Petitioner cannot be considered."*

2.36 Security Deposit

Maharashtra Electricity Consumers Association submitted that no interest on security deposit is paid to the Consumers. It further suggested that interest at the rate of 12% and above should be provided to the consumers.

Shri M.V. Vaidya submitted that as the billing cycle for domestic consumers has been changed from bi-monthly to monthly, additional security deposit should be refunded to the consumers or billing cycle should be rolled back to bi-monthly pattern.

MSEDCL's Response

MSEDCL has not submitted any reply to the above objection.

Commission's Ruling

The interest on consumers' security deposit is payable at the rate of 6%, and the same has been considered as an expense, while determining the ARR of MSEDCL.

2.37 FAC Charges/ RGPPL Charges/ Additional Energy Charges

Lloyds Steel Industries Limited submitted that MSEDCL is charging FAC/RPPGL/Additional Energy Charges based on previous calculations. These charges are declared at the end of billing month just before issuance of the monthly bills. The Commission should direct MSEDCL to declare energy charges applicable to that particular month at the start of billing month.

Maharashtra Elektrosmelt Limited submitted that MSEDCL has proposed to remove 10% ceiling on FAC and to charge FAC on a differential basis. It further submitted that FAC is being charged on the basis of consumption of electricity and thus, it is directly linked to the energy consumed by the consumer. Thus, the proposal submitted by MSEDCL is against the provisions of MERC Tariff Regulations, 2005 and should not be considered.

TBIA and others submitted that MSEDCL is collecting huge amount of FAC Charges and if cap on FAC is removed, the consumers will have to bear tariff shock each month. MSEDCL is not losing any amount as in the truing-up process the Commission is passing whole power purchase expenses to the consumers.

Maharashtra State Cooperative Textile Federation Limited objected for removal of 10% ceiling on levy of FAC.

Shri. N. Ponrathnam, authorised Consumer Representative, submitted that the Commission should not allow recovery of variable cost of power due to tariff of generation not determined by CERC in FAC as it means violation of Section 62 (4) of EA 2003.

Shri Anil Chavan submitted that he is in favour of removing the 10% cap of FAC subject to the restriction on distribution losses. He further submitted that similar to FAC, Power Purchase charges and T & D loss charges should be introduced for balancing the future requirement of power.

MPECS submitted that FAC is being charged by MSEDCL on their actual consumption while, from MPECS, FAC is charged by MSEDCL on total power purchases rather than actual consumption. It also submitted that as it is resorting to load shedding in accordance with instruction of MSEDCL, the ASC and cost towards purchase of costly power should not be levied to it.

Tata Motors Limited submitted that that it has observed serious discrepancies in respect of the revenue collected by MSEDCL on account of FAC. It submitted that according to its estimates, during FY 2009-10, MSEDCL has recovered FAC of Rs. 1741 Crore as against Rs. 1574 Crore as submitted by MSEDCL in the Petition. It further requested the Commission to reduce the FAC cap from 10% to 5%.

MSEDCL's Response

MSEDCL submitted that MSEDCL has proposed that the FAC should be levied on proportionate basis and FAC Cap of 10 % to be removed.

Commission's Ruling

The Commission's detailed rationale and ruling in this regard have been elaborated in Section 5 of this Order. As regarding revenue from FAC, the Commission has considered actual revenue from sale of power, which includes the FAC revenue of around Rs 1685 Crore, while doing provisional truing up of FY 2009-10.

2.38 Additional Surcharge

Shri. N. Ponrathnam, authorised Consumer Representative, submitted that there is no provision of charging additional surcharge due to costly power purchase from RGPPL as approved by the Commission as it is violation of Section 62 (4) of EA 2003. The extra cost incurred should be trued up in ARR only.

MSEDCL's Response

MSEDCL submitted that it is levying and recovering additional RGPPL capacity charge in accordance with the Commission's Order dated December 3, 2009 in Case No. 61 of 2009.

Commission's Ruling

MSEDCL is levying additional RGPPL capacity charges based on the Commission's approval for the same, vide Order dated December 3, 2009 in Case No. 61 of 2009. The detailed rationale for allowing MSEDCL to recover this charge has been elaborated in the above-said Order.

2.39 Load Shedding

Shri Madhusudan Roongta and others submitted that MSEDCL has not followed the load shedding protocol approved by the Commission. They submitted that MSEDCL has always projected higher demand and lesser supply. He further requested the Commission to make some policy decisions by involving local bodies and associations in supervising strict implementation of Load Shedding protocol.

TBIA submitted that MSEDCL should submit a proper load shedding protocol for Maharashtra in order to regulate the consumption of electricity and hours of availability. It also submitted that procurement of power should be based on firm power supply so as to ensure zero load shedding.

Anil Chavan submitted that the power purchase cost for FY 2008-09 and FY 2009-10 has been shown in the Petition after excluding the procurement of power for Zero Load Shedding (ZLS) by MSEDCL. He further submitted that it is the duty of MSEDCL to supply the electrical power without load shedding subject to the availability of power. Therefore, it is obligatory under law that the ZLS proposal should be discussed along with the present Petition.

MASSIA submitted that ZLS should be removed as it has resulted in increase in average cost of consumption. It further submitted that without increase in consumption it has to pay additional 75 paise per unit under ZLS, which has resulted in increase in 16.78% per unit cost.

MSEDCL's Response

MSEDCL submitted that ZLS is a revenue neutral mechanism operating in the State of Maharashtra. The Commission is dealing with the matter under separate Petitions and public hearings in the matter are also scheduled on the Petitions. The present APR Petition has been filed in accordance with Regulation 17 of MERC Tariff Regulations.

MSEDCL further submitted that the reconciliation process of cost of power purchased for ZLS is carried out separately and submitted to Commission. Therefore, neither the cost of power purchase for maintaining ZLS nor revenue from reliability charge has been considered in the current APR Petition of FY 2009-10 and Tariff Proposal of FY 2010-11.

Commission's Ruling

The Commission has undertaken the present exercise of Annual Performance Review of FY 2009-10 and tariff determination for FY 2010-11 under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003) and all other powers enabling it in this behalf. The issue of adherence to load shedding protocol as well as the levy of Reliability Charges for areas benefitting from ZLS, are being addressed through separate Petitions.

2.40 Discounts/ Incentives to the Consumers

Bosch Limited submitted that prompt payment discount of 2% should be given to consumers. It further submitted that the Commission should grant rebate of 1% on energy charge applicable to EHV consumers.

Vidarbha Chamber of Commerce & Industry submitted that 50% of electricity of Maharashtra is generated in Vidarbha region but no benefit is being given to the consumers of this area.

MSEDCL's Response

MSEDCL submitted that it implements the incentive scheme as per the Commission's directions. There are various incentive scheme already operational in state of Maharashtra, i.e., Prompt Payment, Power Factor, Time of Day (off peak), Load Factor, etc. These incentive schemes are approved by the Commission in various Tariff Orders.

MSEDCL submitted that it has not proposed such incentive scheme in the present APR Petition of FY 2009-10. It further submitted that Commission is the competent authority to decide on the matter and would deal with this issue while finalizing the APR Petition of FY 2009-10.

Commission's Ruling

Keeping in view the consumers' demand, the Commission has retained the incentives and penalties at the existing levels, as elaborated in Section 5 of this Order.

2.41 Direction for compliance of Regulations

Shri N. Ponrathnam submitted that Electricity Companies should be directed by the Commission to enter into formal agreements for space required for distribution transformers in order to comply with Section 5.5 of MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005.

MSEDCL's Response

MSEDCL submitted that it generally complies with the provisions made in MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005.

Commission's Ruling

These aspects are not within the scope of the present exercise, which is being undertaken to determine the truing up requirement for FY 2008-09, provisional truing up for FY 2009-10, and determination of ARR and tariff for FY 2010-11.

2.42 Quality of Power Supply

TBIA submitted that frequent power tripping and such other interruptions cause severe loss to the production as well as equipment and appliances.

Tata Metaliks Limited submitted that it is getting low voltage, i.e.; 27 to 28 kV instead of 33 kV during peak hours. It further submitted that MSEDCL should ensure availability of 33 kV power on continuous basis to Tata Metaliks Limited.

Gharda Chemicals Limited submitted that even connected on an express feeder, it is not enjoying uninterrupted power supply as committed by MSEDCL.

Akhil Bharatiya Grahak Panchyat suggested that MSEDCL should remove the disparity in distribution of electricity between the power supply to big cities and other places. The consumers are paying the required cost of electricity and have a right to get uninterrupted and quality supply for 24 hours, and a guarantee of continuous supply from MSEDCL.

Shri A.R. Bapat submitted that a performance review should be undertaken to study various performance indices like SAIDI, SAIFI and CAIDI. He further submitted that these indices will indicate yearly performance of MSEDCL.

Shri Manish Suri from Aryan Industries submitted that MSEDCL is doing load shedding in areas other than Mumbai only because people of Mumbai are paying high costs. He further suggested to do load shedding in Mumbai for at least 1 hour.

Nashik Municipal Corporation submitted that distorted waveforms are observed in MSEDCL's power supply and there is no restriction on THD harmonics. It requested the Commission to direct MSEDCL to take necessary measures to restrict the harmonic distortion in order to ensure quality supply to consumers.

Shri S.L. Deshmukh submitted that the energy audit system is required to be strengthened at every level, i.e. sub-stations, distribution transformers, meters installed at consumers' premises etc.

Sajag Nagrik Manch submitted that meters of only 10% of LT-I (Domestic) and LT-II (Commercial) category have been checked after installation. Due to these outdated meters, the electricity billed is much less as compared to electricity actually consumed. This results in loss of revenue of MSEDCL.

MSEDCL's Response

MSEDCL submitted that the circle-wise Reliability Indices for FY 2008-09 and FY 2009-10 (up to Jan 10) is given in reply to query no. 44 of preliminary data gaps before Technical Validation Session. The Reliability Indices over past two years are as under:

Year	SAIFI	SAIDI	CAIDI
FY 2008-09	14.51	495.04	34.49
FY 2009-10 (up to Jan 10)	16.86	574.48	33.25

MSEDCL further submitted that it has taken due note of consumer submissions, and it will act in accordance with the directions given by Commission.

Commission's Ruling

The Commission is of the view that concerns expressed by consumers regarding the quality of supply are important, and MSEDCL should seriously look into the matter, to ensure that the overall objective of supplying quality electricity of appropriate voltage to the consumers is achieved. However, the same cannot be addressed by the Commission in the present proceedings.

2.43 Electronic Card Metering

Shri M.V. Vaidya submitted that MSEDCL has proposed to conduct a pilot project for introduction of pre-paid metering cards thereby getting rid of meter reading and remote control on energy usage. He further submitted that a fixed rate is required so that consumer can buy a card meant for fixed units and consumption should be independent of days.

Janhit Manch submitted that MSEDCL should initiate phase-wise program to install electronic meters and/or promote pre-paid meters that will effectively reduce under-recoveries, outstanding dues, distribution losses and power thefts.

MSEDCL's Response

MSEDCL submitted that it has entered in to ambitious plan in current fiscal to facilitate mass meter replacement, i.e., replacement of electromechanical meters with electronic meters.

1. MSEDCL submitted that it has purchased 25,80,784 Single phase and Three phase meters both for new connection & replacement of Faulty & Electro Mechanical meters which are in service for more than 15 years in a systematic way

2. It submitted that out of the above quantity, 8,59,973 Nos. of single phase & 79,928 Nos. of three Phase Meters have been utilized by the end of Jan-10 for replacement of faulty and Electromechanical meters.
3. Besides the above, it has placed an order for purchase of meters, which will be received in phased manner.

MSEDCL submitted the status of Metering under APDRP scheme carried out over the past few years, as under:

Replacement of 1 ph static meters		**Installation of 3 ph IP meter**		**Installation of 3 ph CT.Op. meter**		**CT OP. Meters at DTC**		**Ag Meters**	
Target	Achvt.	Target	Achvt.	Target	Achvt.	Target	Achvt.	Target	Achvt.
1686882	**1149635**	**73360**	**65412**	**4436**	**2765**	**30514**	**27494**	**375618**	**314385**

Commission's Ruling

The Commission's ruling in this regard and the rationale for the same has been elaborated in Section 5 of this Order.

2.44 Additional voltage surcharge

Bhagwandas Ispat Private Limited and others requested the Commission to direct MSEDCL to stop levying voltage surcharge of 2% additional units to be billed for supply to the consumers in case voltage is lower than that specified in Standards of Performance.

Pudumjee Pulp & Paper Mills submitted that MSEDCL has proposed to levy 2% voltage surcharge on HT consumers having contract demand more than SoP limit in respect of supply voltage. It further requested the Commission that any new Regulations should not be made applicable to existing consumers.

MSEDCL's Response

MSEDCL submitted that the proposed voltage surcharge of 2% will be applicable to all such consumers who have been released power supply at a voltage level below the prescribed voltage level, irrespective of the date of connection.

Commission's Ruling

The Commission has approved MSEDCL's request for levying Voltage Surcharge of 2% additional units to be billed, for supply to the consumers at voltages lower than that specified in the SoP Regulations, as an Interim relief. This issue has been discussed in detail in Section 5 of this Order.

2.45 Delayed Payment Surcharge

Ispat Industries Limited submitted that the interest on delayed payments and interest on arrears forms the largest part of Non Tariff Income. It requested the Commission to direct MSEDCL to remove the 2% delayed payment charges and charge only 12% interest on arrears as applicable for agricultural consumers, instead of the proposed 18%.

MSEDCL's Response

MSEDCL submitted that timely payment of dues is extremely important from operational point of view and also from the point of overall financial dispensation. In a regulated regime, all the recoveries as per the Commission's Tariff Orders are necessary to meet the obligations cast upon the Utility. Thus, any non-payment has to be dealt subsequently and has to act as a deterrent so as to ensure timely payments.

MSEDCL further submitted that this is a very old provision continuing from last more than 20 years. Therefore, it will not be prudent to adjust the same as suggested by consumer at this stage.

Commission's Ruling

The Commission's views in this regard have been elaborated in Section 5 of this Order.

2.46 Power Purchase Quantum

Tata Motors Limited submitted that if comparison is done between power purchase quantum of FY 2009-10 of MSEDCL with respect to CEA, there is difference of 4312 MU in respect of MSPGCL. It further submitted that according to CEA Report, during FY 2009-10, MSEDCL has purchased 91652 MU whereas MSEDCL has considered available quantum of 85261 MU for FY 2009-10 in its Petition. It means that MSEDCL has not shown 6391 MU in their ARR which corresponds to Rs. 2780 Crore at an average cost of supply of Rs. 4.35 per unit.

Tata Motors Limited submitted that the revenue of these units should be considered while working out ARR. It further requested the Commission to direct MSEDCL to furnish authenticated Power Purchase data with copies of invoices of Power Purchased during FY 2009-10.

Tata Motors Limited submitted that MSEDCL is having more dependency on MSPGCL's comparatively low cost power but MSPGCL is failing on y-o-y basis to meet MSEDCL's requirement. It further submitted that in order to fulfil part of the gap, MSEDCL purchased very costly power (941 MU) from traders even though it was not approved in Tariff Order. MSEDCL is trying to recover this costly power through Tariff Hike. It further submitted that there is significant potential to reduce ARR by Rs. 2000 Crore if MSEDCL makes long term power purchase plan from other sources and reduce dependency on MSPGCL stations. It further suggested that MSPGCL should ensure to supply targeted power with at least 10% growth and performance based disincentives should be introduced by MSEDCL in Power Purchase Agreement with MSPGCL.

MSEDCL's Response

MSEDCL has not replied to this issue.

Commission's Ruling

The Commission has been regularly directing MSEDCL to enter into the necessary long-term power purchase agreements at reasonable prices, to mitigate the demand-supply gap in its licence area. For FY 2010-11, based on the projected sales and allowed distribution losses, the energy requirement and power purchase from various sources has been considered, as elaborated in Section 4 of this Order. Based on the Commission's realistic projections of sales and power purchase, the power purchase from traders has been estimated as nil.

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

MSEDCL, in its Petition for Annual Performance Review for FY 2009-10 and determination of revenue requirement and tariff for FY 2010-11, sought approval for final truing up of expenditure and revenue for FY 2008-09 based on actual expenditure and revenue for FY 2008-09 as per audited accounts.

In this Section, the Commission has analysed all the elements of actual revenue and expenses for FY 2008-09, and has undertaken the truing up of expenses and revenue after prudence check. Further, for FY 2008-09, the Commission has approved the sharing of gains and losses on account of controllable factors between MSEDCL and the consumers, in accordance with Regulation 19 of the MERC Tariff Regulations, in this Section.

3.1 Sales

MSEDCL submitted the month-wise actual category-wise sales in FY 2008-09 in the Formats annexed to the APR Petition. The summary of actual sales in FY 2008-09 is given in the Table below:

Table: MSEDCL's Actual Sales in FY 2008-09 ***(MU)***

Sl.	Particulars	APR Order	Actuals	Allowed after final truing up
1	Sales	57796	58171	58171

The actual sales reported by MSEDCL have been higher than the sales originally considered in the APR Order, by 375 MU. In the previous APR Order, the Commission had obtained the details of category-wise sales from April 2008 to March 2009, and MSEDCL's estimate of un-metered agricultural consumption, at 7097 MU, was accepted for the purpose of provisional truing up.

In the present APR Petition, MSEDCL has provided details of actual sales to metered categories over the entire year, and has estimated un-metered agriculture consumption using the method approved by the Commission, i.e., based on recorded consumption of metered agricultural consumers for FY 2008-09. The Commission has hence, considered the actual sales as reported by MSEDCL under the truing up process.

3.2 Distribution Losses and Energy Balance

MSEDCL submitted that the Commission in the APR Order dated August 17, 2009 has determined distribution loss for FY 2007-08 as 26.20% with a distribution loss reduction target of 4% for FY 2008-09, which works out to a target loss level of 22.20%. MSEDCL submitted that the actual distribution loss for FY 2008-09 was 21.98% and the over-achievement of 0.22% translates to revenue of Rs 44 Crore (0.22% of Rs 20159 Crore), which needs to be shared as per Regulation 19 of MERC Tariff Regulations.

The Commission observed that for computing the Energy Balance and the efficiency gains, MSEDCL has considered the Energy Input at Transmission Periphery as 78360 MU, whereas in Form-2, it has submitted the same as 78630 MU. The Commission has accepted the Energy Input at Transmission Periphery as 78630 MU, based on Form-2 submitted by MSEDCL, where the source-wise purchases have been provided.

The Commission has considered the sales projections as approved in the earlier paragraphs. The pooled intra-State transmission losses for FY 2008-09 has been considered as 4.86%, based on the inputs received from the Maharashtra State Load Despatch Centre (MSLDC) under its Interim Balancing and Settlement Mechanism (IBSM). The distribution loss in MSEDCL's system has been accordingly re-computed as 22.24%, as compared to MSEDCL's submission of 21.98%.

Though, MSEDCL has claimed sharing of efficiency gains on account of lower than normative distribution loss, the re-computed distribution loss is higher than the normative distribution loss, hence, the Commission has computed the efficiency loss on account of the higher distribution losses, as discussed in a subsequent sub-section under this Section.

The Energy Balance for FY 2008-09 for MSEDCL as submitted by MSEDCL and as approved by the Commission is given in the Table below:

Particulars	Units	FY 2008-09	
		Petition	Approved

Particulars	Units	FY 2008-09	
		Petition	Approved
Purchase from MSPGCL	MU	46,257	46,257
Purchases from other sources within the State	MU	7928	7928
Total Purchase from within the State	**MU**	**54,185**	**54,185**
Effective gross purchase from outside the State	**MU**	**25,686**	**25,686**
Central Generating Station	MU	*22,053*	*22,053*
UI	MU	*797*	*797*
Kawas/ Gandhar/ Traders	MU	*2,835*	*2,951*
Inter-State transmission losses	%	5.88%	4.83%
Net purchase from outside the State	MU	24,176	24,446
Total Power Purchase payable	**MU**	**79,870**	**79,870**
Energy at Transmission Periphery	**MU**	**78,360**	**78,630**
Intra- State Losses	**%**	**4.85%**	**4.86%***
Energy at Distribution Periphery	MU	74559	74809
Distribution losses	**%**	**21.98%**	**22.24%**
Energy Sales	**MU**	**58171**	**58171**

Note: * Based on inputs received from MSLDC under the Interim Balancing and Settlement Mechanism

3.3 Power Purchase Quantum and Cost for FY 2008-09

The Commission, in its APR Order for FY 2007-08 in Case No 116 of 2008 dated August 17, 2009, approved power purchase quantum of 77567 MU and total power purchase expenses of Rs 17774 Crore for FY 2008-09. The Commission also considered the intra-State transmission charges payable by MSEDCL at Rs 1744 Crore for FY 2008-09, based on the approved transmission tariff and SLDC charges for FY 2008-09.

MSEDCL, in its APR Petition, submitted that the actual power purchase expenses for FY 2008-09 are Rs. 18054 Crore and the actual transmission charges paid to MSETCL for

FY 2008-09 are Rs. 1739 Crore. Hence, MSEDCL requested for true up of Rs. 280 Crore towards power purchase expenses and Rs. (-) 5 Crore towards transmission charges. MSEDCL also submitted that the increase in power purchase expenses is because of the increase in MSPGCL's FAC, increase in cost of power purchase from RGPPL (Rs. 72 crore) and increase in the transmission charges paid to PGCIL on account of commissioning of new inter-State transmission lines.

The Commission has considered the actual power purchase expenses for the period from April 1, 2008 to March 31, 2009, based on the audited accounts of MSEDCL for FY 2008-09, after deducting power purchase cost pertaining to ZLS scheme.

As regards power purchase from Renewable Energy (RE) sources, based on actual power purchase details submitted by MSEDCL for FY 2008-09, it is observed that MSEDCL has purchased around 3.36 % of energy from renewable energy sources against the target of 5%. The Commission, in its Order in the matter of long term development of renewable energy sources and associated regulatory (RPS) framework in Case No. 6 of 2006 dated August 16, 2006, while stipulating the enforcement of the RPS framework vide Para 3.1.9 stipulated as follows:

> ***"Enforcement****: The Eligible Persons will have to comply with their RPS obligations as stipulated under Clause 2.6.8 of this Order subject to conditions stipulated under cl. 2.10.7 and cl. 2.10.8. Shortfall in RE procurement by Eligible Persons shall be treated as non-compliance with the Commission's directives, and shall attract action as per appropriate provisions of EA 2003. The Commission directs MEDA to report such incidences of failure to comply by Eligible Persons, to the Commission.* ***During first year of RPS operating framework, i.e., 2006-07, there shall not be any charge towards enforcement.*** *However, the Eligible Persons shall be liable to pay at the rate of Rs 5.00 per unit of shortfall in 2007-08, Rs 6.00 per unit of shortfall in 2008-09, and Rs 7.00 per unit of shortfall for 2009-10. Such charges towards shortfall in renewable energy procurement levied on distribution licensees will not be allowed as 'pass through' expenses under their Annual Revenue Requirement." (emphasis added)*

However, in the context of enforcement on account of non-fulfilment of the RPS target, Petitions for waiver of the RPS target were filed by MSEDCL, RInfra-D and BEST in Case Nos. 104, 122 and 125 of 2008, respectively. The Commission, in its Order dated August 7, 2009, in the above mentioned cases stipulated as under:

> *"38. The Commission is of the view that while it has noted the efforts taken by licensees for RE procurement, the failure to generate RE power or install capacity sufficiently in advance, despite contracts being in place (in case of MSEDCL) will have to be addressed through suitable contracting arrangements. In this context, the Commission notes that one of the licensees, namely, TPC has been able to achieve the RPS target.*
>
> *39. Further, considering year-to-year shortfall in RE capacity addition, the Commission is of the view that it would not be practical to expect that such shortfall can be made good on cumulative basis by the end of FY 2009-10. Hence, the Commission believes that in pursuance of Cl. 2.6.12 of RPS Order (Case 6 of 2006), it would be most appropriate to modify the RPS percentage requirement for FY 2007-08, FY 2008-09 and FY 2009-10 to be lower of (a) RPS target as specified under Cl. 2.6.7 or (b) actual achievement of RPS target in respect of each 'Eligible Person'."*

In view of the above, the Commission has considered the actual purchase from renewable sources for FY 2008-09.

As regards the cost of power purchase from RGPPL, for the purpose of this Order, the Commission has considered the actual cost paid to RGPPL. However, the matter of RGPPL tariff as determined by the Central Electricity Regulatory Commission for this period is being agitated by RGPPL before the Appellate Tribunal for Electricity (ATE), and the matter is pending with the ATE. and hence, the Commission directs MSEDCL to submit the detailed analysis of impact of ATE Judgment and relevant CERC Orders pertaining to RGPPL, in the next tariff determination process.

As regards the transmission charges paid to MSETCL for FY 2008-09, the Commission has considered the actual charges of Rs. 1739 Crore. The summary of the power purchase expenses considered by the Commission for true up purposes is shown below:

Table: Power Purchase Cost and Transmission Charges considered for True – Up for FY 2008-09 (Rs Crore)

Particulars	APR Order	Claim for Truing Up by MSEDCL	Approved after final truing up
Power Purchase Cost	17774	18054	18054
Intra-State Transmission Charges	1744	1739	1739

3.4 O&M Expenses

Operation & Maintenance (O&M) expenditure comprises of employee related expenditure, Administrative & General (A&G) expenditure, and Repair & Maintenance (R&M) expenditure. MSEDCL's submissions on each of the heads of O&M expenditure for FY 2008-09, and the Commission's ruling on the truing up of the O&M expenditure heads are detailed below.

3.4.1 Employee Expenses

MSEDCL submitted that the total actual employee expenses for FY 2008-09 was Rs 2486 Crore as against Rs 2276 Crore approved by the Commission in the previous APR Order. MSEDCL submitted that the main reason for the increase in the employee expenses is because the impact of pay revision approved by the Commission in the previous APR Order was Rs.364 Crore, whereas the actual expenditure in this regard is Rs 417 Crore (towards basic pay, dearness allowances and other allowances). MSEDCL also submitted that in the previous APR Order, the impact of pay revision on terminal benefits such as provision for gratuity and leave encashment was not considered. MSEDCL submitted that the provision for gratuity and leave encashment has increased considerably due to pay revision.

MSEDCL submitted that it is very difficult to capture correct financial impact of wage revision as well as variation in the rate of Dearness Allowance and this head of expenditure should be classified as uncontrollable.

MSEDCL requested the Commission to consider true-up of Rs 210 Crore, as per actual audited expenses.

MSEDCL added that it had considered Rs 88 Crore as net employee expenses corresponding to deferred expense for Earned Leave Encashment as per the Commission's Order dated June 20, 2008 on MSEDCL's APR Petition for FY 2007-08. MSEDCL added that as per audited Accounts for FY 2008-09, the employee cost has been capitalised at a rate of 8.30%.

Considering the details of actual employee expenses submitted by MSEDCL, the Commission has accepted the actual employee expenses for FY 2008-09 under the truing up exercise. The capitalisation of employee expenses has been considered at the same percentage as the actual capitalisation submitted by MSEDCL. The summary of the employee expenses approved by the Commission under the truing up exercise has been shown in the following Table:

Table: Employee Expenses ***(Rs Crore)***

Particulars	**APR Order**	**Actuals**	**Allowed after truing up**
Gross Employee Expenses	**2301.00**	**2615.41**	**2615.41**
Less: Expenses capitalized	114.00	217.02	217.02
Employee Expenses (Net after capitalisation)	**2188.00**	**2398.39**	**2398.39**
Deferred expense for Earned Leave Encashment	**88.00**	**88.00**	**88.00**
Net Employee Expenses	**2276.00**	**2486.39**	**2486.39**

3.4.2 A&G Expenses

MSEDCL submitted that the actual net A&G expenses incurred in FY 2008-09 were Rs 318 Crore as against Rs 201 Crore approved by the Commission in the APR Order for FY 2008-09. The reasons for increase in A&G expenses for FY 2008-09 as submitted by MSEDCL are as follows:

- **Rent and Taxes:** Rs.5 Crore Cess paid to excise department by Vashi circle, which was not considered in MSEDCL's petition for FY 2008-09, has been considered for FY 2008-09.
- **Security Arrangements:** The threat of misappropriation, theft, damage, etc., is higher in MSEDCL's licenced area of supply, which is very wide and distribution assets are largely in the open area. Hence, in order to protect the properties and employees of MSEDCL, additional security measures were provided, which has increased the security expenses.
- **Expenditure on computer billing:** The actual expenditure is higher because of increase in number of consumers and increase in rates, coupled with innovative ideas such as photo meter-reading.

The Commission is of the view that A&G expenses, being controllable in nature, cannot be allowed to increase at the rates considered by MSEDCL, and MSEDCL has to share the efficiency loss due to controllable factors as provided under the MERC Tariff Regulations. However, the Commission has allowed the expenditure on Cess paid to the Excise Department. For truing up of other sub-heads of A&G expenses for FY 2008-09, the Commission has considered the expenses as approved in the provisional true up for FY 2008-09 in the APR Order dated August 17, 2009. The capitalisation of A&G expenses has been considered as 9 %, based on the actual capitalisation rate for FY 2008-09.

The summary of A&G expenses approved in the APR Order, actual A&G expenses, and A&G expenses approved after truing up for FY 2008-09 has been shown in the following Table:

Table: A&G Expenses ***(Rs Crore)***

Particular	**APR Order**	**Actuals**	**Allowed after truing up**
Gross A&G Expenses	250.46	349.52	255.46
Less: Capitalisation	49.86	31.98	23.37
Net A&G Expenses	**200.60**	**317.54**	**232.09**

However, the difference between the actual A&G expenses and the A&G expenses allowed after truing up for FY 2008-09 has been considered as a controllable efficiency loss and has been shared between MSEDCL and the consumers in accordance with Regulation 19 of the MERC Tariff Regulations, as explained later in this Section.

3.4.3 R&M Expenses

MSEDCL submitted that the actual R&M expenses for FY 2008-09 were Rs 599 Crore, as compared to the R&M expenses of Rs. 458 Crore approved by the Commission in the APR Order for FY 2008-09. MSEDCL submitted that the increase in R&M expenses in FY 2008-09 is attributable to the increase in the R&M of lines and underground cables, which in turn is on account of the following reasons:

- MSEDCL submitted that till FY 2007-08, the entire transit insurance, vehicle running expenses, transportation expenses, advertisement of tenders, notices, incidental stores expenses, other material related expenses and fabrication charges were being charged to the revenue account. However, during the year, all these expenses amounting to Rs.16.04 Crore have been charged to revenue account and capital works in ratio of usages of material being used for repairs and maintenance. Hence, Rs.3.05 Crore have been charged to Repairs and Maintenance, as part of these expenses for the material used for Repairs and Maintenance.
- There was requirement for significant R&M works mainly due to ageing effect and non-attendance to the critical R&M needs in the past owing to paucity of funds. R&M expenditure includes the works like replacement of HT & LT Cables, Distribution boxes, LT & HT poles, single phase/three phase/CT operated Meters, DTC Maintenance, re-earthing, providing guarding, crimping of jumpers at cut points, labour charges on all above, etc. Most of the distribution networks are overhead and therefore, susceptible to the onslaught of environment and other related factors. In order to improve the system and reduce distribution losses, the old cables, distribution transformers, meter panels and relays have been replaced in affected areas.

- In the coastal and hilly areas, the corrosion effect is very prominent, and consequently, the R&M expenses are higher.

As the Commission is undertaking the truing up of expenses for FY 2008-09 based on actual expenses subject to prudence check, the Commission has considered R&M expenses of Rs 458.22 Crore for FY 2008-09 as approved in the previous APR Order. The Commission has not considered the additional expenditure claimed by MSEDCL, over and above the approved expenditure, since there has been no extra-ordinary circumstance necessitating additional R&M expenses, and all the reasons given by MSEDCL are occurrences that occur every year. Further, the explanation given by MSEDCL regarding change in accounting policy, actually results in reducing the R&M expenses booked under revenue expenditure, rather than increasing it. Also, the allowed R&M expenses as a percentage of opening GFA is already 4.20%, and cannot be allowed at higher rates of around 5.5 % of opening GFA, as sought by MSEDCL. However, the difference between the actual R&M expenses and the R&M expenses allowed after truing up for FY 2008-09 has been considered as a controllable loss and has been shared between MSEDCL and the consumers in accordance with Regulation 19 of the MERC Tariff Regulations, as explained later in this Section.

The summary of R&M expenses approved in the Order, actual R&M expenses and R&M expenses approved after truing up for FY 2008-09 has been shown in the following Table:

Table: R&M Expenses (Rs Crore)

Particular	APR Order	Actuals	Allowed after truing up
R&M Expenses	458.22	598.78	458.22

3.5 Revised Capitalisation for FY 2007-08

In its previous APR Order for MSEDCL dated August 17, 2009, while truing-up of FY 2007-08, the Commission provisionally considered capitalisation of Rs. 463.16 Crore, as against Rs. 1108 Crore submitted by MSEDCL and directed MSEDCL as under:

> *"As regards whether projected benefits have actually accrued for the benefit of consumers, the Commission directs BEST to submit the detailed report with established benefits vis-à-vis the benefits projected, within one month from the issuance of this Order. The Commission, at the time of annual performance review, shall consider revision of approved capitalisation for FY 2007-08, if necessary, upon scrutiny of BEST's submission in this respect."*

As MSEDCL has not submitted the detailed report on cost-benefit analysis of the capital expenditure schemes carried out in FY 2007-08, the Commission has retained the capitalisation during FY 2007-08 at Rs. 463.16 Crore as approved in previous APR Order.

3.6 Capital Expenditure and Capitalisation

MSEDCL, in its APR Petition for FY 2009-10, has submitted that the total capitalisation considered by MSEDCL for FY 2008-09 is Rs. 1481 Crore, while the Commission had approved Rs. 942 Crore in the APR Order. The project details and capital expenditure and capitalisation as considered by MSEDCL are shown in the Table below:

Project Title	**Investment during the year**	**Capitalisation during the year**
Infrastructure Plan works	114.50	96.22
Gaothan Feeder Separation Scheme - Phase I	229.08	192.52
Gaothan Feeder Separation Scheme - Phase II	107.46	90.31
Gaothan Feeder Separation Scheme - Phase III	8.55	7.19
Fixed Capacitor Scheme	1.90	1.59
AMR	6.27	5.27
FMS	0.73	0.61
APDRP		
Phase-I	71.37	59.97
Phase-II	90.70	76.22
R-Apdrp A	0.00	0.00
R-Apdrp B	0.00	0.00
Internal Reform		
DTC Metering		
Phase-II (Part I & II)	18.77	15.78
Phase-III	0.37	0.31
MIS	0.48	0.40
DRUM	96.80	81.35
Load Management	7.58	6.37
Distribution Scheme		
P.F.C.Urban Distribution Scheme	49.29	41.42
MIDC Interest free Loan Scheme	0.47	0.39
Evacuation	0.00	0.00
Evacuation Wind Generation (Captive Power)	1.61	1.35
Agriculture Metering	40.96	34.42
RGGVY	60.47	50.82
R E Dist		
I- R E / N D		
DPDC / Non-Tribal	153.98	129.40
DPDC / SCP	38.45	32.31
DPDC / TSP + OTSP	41.54	34.91
Rural Electrification (Grant)	30.01	25.22
SPA:PE	231.38	194.44
P:SI	39.48	33.17
P:IE	38.80	32.60
III-JBIC		
JBIC	22.61	19.00
New Consumers	62.69	52.68
Back log	195.47	164.27
Total	**1761.77**	**1480.51**

As per Regulations 59.3, 60.1, 71.3 and 72.1 of the MERC Tariff Regulations, the approved investment plan of the distribution licensee shall be the basis for determining the annual allowable capital cost for each financial year for any capital expenditure project initiated on or after April 1, 2005 with a value exceeding Rs 10 Crore.

The Commission sought scheme-wise details of capitalisation claimed by MSEDCL and its funding, which MSEDCL has not submitted. With the schemes clubbed together, it is difficult to ascertain whether the schemes capitalised have been approved by the Commission. However, based on the data available with the Commission, the total capitalisation for FY 2008-09 corresponding to capital expenditure schemes approved by the Commission amounts to Rs. 711.97 Crore out of total capitalisation of Rs 1481 Crore proposed by MSEDCL. The details of schemes approved by the Commission based on the Detailed Project Report (DPRs) submitted by MSEDCL, are shown in the Table below:

(Rs. Crores)

Project Title	**Opening CWIP**	**Investment during the year**	**Capitalisation during the year (FY 08-09)**				**Closing CWIP**
			Works Capitalised	**Interest Capitalised**	**Expense Capitalised**	**Total Capitalisation**	
Infrastructure Plan works	256.74	114.50	79.79	2.33	14.11	96.22	275.02
Gaothan Feeder Separation Scheme - Phase I	230.40	229.08	159.64	4.66	28.22	192.52	266.96
Gaothan Feeder Separation Scheme - Phase II	0.00	107.46	74.89	2.19	13.24	90.31	17.15
Gaothan Feeder Separation Scheme - Phase III	0.00	8.55	5.96	0.17	1.05	7.19	1.36
Fixed Capacitor Scheme	0.00	1.90	1.32	0.04	0.23	1.59	0.31
AMR	0.00	6.27	4.37	0.13	0.77	5.27	1.00
APDRP							
Phase-I	516.17	71.37	49.73	1.45	8.79	59.97	527.57
Phase-II	15.27	90.70	63.20	1.84	11.17	76.22	29.75
R-Apdrp A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Internal Reform							
DTC Metering							
Phase-II (Part I & II)	3.04	18.77	13.08	0.38	2.31	15.78	6.03
Phase-III	0.00	0.37	0.26	0.01	0.05	0.31	0.06
DRUM	23.00	96.80	67.46	1.97	11.93	81.35	38.45
Distribution Scheme							
Agriculture Metering	0.00	40.96	28.54	0.83	5.05	34.42	6.54
RGGVY	31.93	60.47	42.14	1.23	7.45	50.82	41.58
	1076.53	**847.20**	**590.37**	**17.23**	**104.37**	**711.97**	**1211.76**

The Commission also observed that most of schemes categorised by MSEDCL under Non-DPR schemes were in excess of Rs 10 Crore, for which, DPRs have to be submitted, and prior approval of the Commission has to be obtained.

Hence, the Commission has not considered capitalisation of schemes entailing capital outlay in excess of Rs 10 Crore, but for which, no DPRs have been submitted to the Commission for approval. MSEDCL in its Petition has submitted a total capitalisation of Rs. 1481 Crore and has not segregated capitalisation into DPR schemes and Non-DPR schemes.

The Commission, in its previous APR Order, ruled that

"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 MSEDCL 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. MSEDCL 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. Moreover, MSEDCL has not submitted the details of actual capital expenditure and capitalisation in FY 2008-09 till date. Accordingly, out of proposed capitalisation of Rs 2859.59 Crore by MSEDCL during FY 2008-09, the Commission has considered total capitalisation of Rs. 941.71 Crore during FY 2008-09 equivalent to 50% of the capitalisation of DPR schemes for which in-principle approval has been granted by the Commission, which amounts to capitalisation of Rs 939.46 Crore and capitalisation of non-DPR schemes of Rs 2.25 Crore. ***The Commission shall consider actual capitalisation of the DPR schemes during FY 2008-09 at the time of annual performance review for FY 2009-10, subject to prudence check and upon evaluation of actual cost-benefit derived in respect of DPR schemes vis-à-vis projected cost-benefit analysis presented at the time of granting in-principle approval for such DPR schemes.***

Out of proposed capitalisation of Rs 5821 Crore during FY 2009-10, the Commission has only considered DPR schemes for which in-principle approval has been granted. Further, as stated earlier, in-principle approval does not absolve the Utility's 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. 1297.73 Crore. 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. Accordingly, the Commission has considered the capitalisation for the period as shown in the Table below:

Table: Capital Expenditure and Capitalisation (Rs Crore)

Particulars	***FY 2008-09***			***FY 2009-10***		
	APR Order	***Revised Estimate by MSEDCL***	***Approved***	***MYT Order***	***Revised Estimate by MSEDCL***	***Approved***
Capital Expenditure	*2471.35*	*1427.00*	*-*	*524.00*	*6913.68*	*-*
Capitalisation	*1414.03*	*2859.59*	*941.71*	*1026.93*	*5821.43*	*1297.73*

" (***emphasis added***)

However, the Commission is yet to receive any cost-benefit analysis report from MSEDCL. Hence, the Commission has considered 50% of approved capitalisation for DPR schemes and the total capitalisation on non-DPR schemes have been capped at 20% of that for approved DPR schemes during that year, as summarised below:

Table: Capital Expenditure and Capitalisation (Rs Crore)

Particulars	**FY 2008-09**		
	APR Order	**Actuals**	**Allowed after truing up**

Capital Expenditure	-	1761.77	-
Capitalisation	941.71	1481 (Approved DPR Schemes- Rs 712 Crore)	427.18
DPR Schemes			*355.99*
Non-DPR Schemes			*71.20*

Hence, the capitalisation of Rs. 427.18 Crore has been approved for FY 2008-09 on a provisional basis, since MSEDCL has to establish that the projected benefits, as submitted to the Commission at the time of seeking approval of the DPR, have actually accrued. The Commission directs MSEDCL to submit the detailed report with established benefits vis-à-vis the benefits projected, within one month from the issuance of this Order.

3.7 Depreciation

The Commission had considered depreciation to the extent of Rs 400.10 Crore for FY 2008-09 in the APR Order dated August 17, 2009, which amounts to 3.69% of Opening level of Gross Fixed Assets (GFA) of MSEDCL for FY 2008-09.

MSEDCL, in its APR Petition, has claimed depreciation on both opening GFA and assets added during the year, which was not sought in its previous APR Petition. The Commission has accepted the request of MSEDCL to allow depreciation on the assets capitalised during the year.

MSEDCL, in its APR Petition, claimed the depreciation as Rs 465.85 Crore, at an overall depreciation rate of 3.95% corresponding to opening GFA of 11805.97 Crore.

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

Table: Depreciation Projected by MSEDCL (Rs Crore)

Particulars	**FY 2008-09**		
	APR Order	**Actuals**	**Allowed after truing up**
Depreciation including AAD	400.10	465.85	408.12
Opening GFA	10831.14	11805.97	10831.13
Depn as % of Op. GFA	**3.69%**	**3.95%**	**3.77%**

3.8 Interest Expenses

The Commission, in its APR Order dated August 17, 2009, had approved interest expenses of Rs 238.33 Crore, after considering the interest on debt corresponding to capitalised assets only. MSEDCL, in its present APR Petition, has claimed that MSEDCL's actual interest expenses on long-term loans in FY 2008-09, net of capitalisation, is Rs 369.89 Crore, as summarised in the following Table:

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

Particulars	**APR Order**	**Actuals**
Op. Balance	2484.04	3630.72
Additions	437.02	776.81
Repayments	(240.62)	(408.56)
Cl. Balance	2680.44	4024.72
Gross Interest Expense	**258.22**	**405.72**
Less: IDC (on Existing Loans)	**(19.88)**	**(35.83)**
Less: IDC (on New Loans)		
Net Interest Expense	**238.33**	**369.89**
Average interest rate (%)	9.2%	10.6%

MSEDCL, in its Petition, has not considered any consumer contribution in FY 2008-09. However, MSEDCL's Audited Accounts show consumer contribution during FY 2008-09. In reply to the Commission's queries in this regard, MSEDCL, in its replies dated August 17, 2010, submitted funding pattern as below:

Table: Funding Pattern (Rs Crore)

Sl.	**Particulars**	**FY 2008-09**
1	Capital Expenditure	1761.77

Sl.	Particulars	FY 2008-09
2	Amount of Capitalisation	1480.51
3	**Sources of Funds**	
4	Consumer Contribution	262.95
5	Grants received during the year	446.27
6	**Net Capital expenditure after deducting CC and grants**	**1052.55**
7	Debt	701.23
8	Equity -Government of Maharashtra	207.8
9	Equity-Internal Accruals	143.52

It may be noted that MSEDCL has considered capital expenditure instead of Capitalisation, for the purpose of submitting the funding pattern. The Commission has considered the same funding pattern on pro-rata basis for the approved capitalisation considered by the Commission in this Order. Accordingly, the funding pattern for the schemes approved by the Commission and considered to be capitalised during FY 2008-09 is shown in the Table below:

Table: Funding Pattern (Rs Crore)

Particulars	FY 2008-09
Total Capitalisation	**427.18**
Sources	**427.18**
Consumer Contribution	63.76
Grants	108.21
Equity	76.56
Debt	178.65

Based on the above, the interest expenses approved by the Commission for FY 2008-09 is shown in the Table below:

Table: Interest Expenses (Rs Crore)

Particulars	APR Order	Actuals	Approved after truing up
Op. Balance	2484.04	3630.72	2484.03
Additions	437.02	776.81	178.65
Repayments	(240.62)	(408.56)	(408.27)
Cl. Balance	2680.44	4024.72	2254.41
Gross Interest Expense	**258.22**	**405.72**	**247.31**

Less: IDC (on Existing Loans)	**(19.88)**	**(35.83)**	**(10.34)**
Less: IDC (on New Loans)			
Net Interest Expense	**238.33**	**369.89**	**236.97**
Average Interest Rate (%)	9.2%	10.6%	10.5%

3.9 Interest on Working Capital and Consumers' Security Deposit and Other Interest and Finance Charges

As regards Interest on Working Capital, MSEDCL submitted that the actual working capital interest incurred was Rs. 48 Crore, as compared to nil interest approved by the Commission in its previous APR Order. MSEDCL has incurred interest expenditure on the short-term loan taken from REC to the extent of Rs. 1300 Crore, which has been considered under the interest on working capital, as actually incurred expenses. MSEDCL submitted that it has tied up this short-term loan from REC to support huge cash shortage and working capital gap in the year 2006. MSEDCL submitted that the major portion of this amount is spent by MSEDCL on procurement of power and to provide electricity to its consumers. MSEDCL has also booked an amount of Rs. 24 Crore on account of Working Capital interest, under Other Interest and Finance Charges. Thus, the total actual working capital interest incurred by MSEDCL in FY 2008-09 is Rs. 72 Crore.

MSEDCL further submitted that the Other Interest and Finance Charges including interest on consumers' security deposit amounted to Rs 195.44 crore, as compared to Rs 258.44 Crore approved by the Commission.

As regards interest on working capital, the MERC Tariff Regulations clearly stipulate that working capital interest has to be considered on normative basis. In MSEDCL's case, because of the significant amount of consumers' security deposit lying with MSEDCL and the credit period of one-month considered on power purchase expenses, the normative working capital requirement works out to be negative. Hence, the Commission has not considered any interest on working capital under the truing up exercise. However, the difference between normative and actual interest on working capital has been considered as a controllable loss and shared between MSEDCL and the consumers in accordance with Regulation 19 of the MERC Tariff Regulations, as explained later in this Section.

MSEDCL's actual expenditure on account of interest on consumers' security deposits and other interest and finance charges has been accepted by the Commission. Thus, the total Other Interest and Finance Charges including interest on consumers' security deposit, considered by the Commission under the truing up exercise, works out to Rs 195.44 Crore.

3.10 Incentives and Discounts

MSEDCL submitted that as per Audited Accounts, the incentives and discounts paid to consumers was Rs 148 Crore as compared to Rs 77 Crore approved by the Commission in the APR Order. The Commission has considered the actual expenditure on this account under the truing up exercise.

3.11 Other Expenses

MSEDCL submitted that the actual Other Expenses incurred by MSEDCL was Rs 14 Crore as compared to Rs 5 Crore approved by the Commission in the previous APR Order. MSEDCL has not provided any justification for this increase.

The Commission examined the break-up of Other Expenses and observed that MSEDCL has claimed Bad debts written off from consumers under this head. However, the Commission is already allowing Provisioning for Bad Debts separately, and both, provisioning as well as actual bad debts written off, cannot be allowed, since the amounts actually written off have to reduced from the provision created by MSEDCL. Also, MSEDCL has claimed provisioning for bad debts from 'Others', which is not allowable under the MERC Tariff Regulations, and MSEDCL has not submitted any justification for the same Hence, the Commission has allowed Other Expenses under the truing up exercise, as summarised below:

Table: Other Expenses (Rs Crore)

S.No.	Particulars	FY 2008-09		
		APR Order	Actual	Allowed after truing up
1	Interest to Suppliers / Contractors		2.67	2.67

S.No.	Particulars	FY 2008-09		
		APR Order	Actual	Allowed after truing up
2	Bad debts w/off dues from consumers		1.92	0.00
3	Bad and doubtful debts provided for others		3.26	0.00
4	Intangible assets written off		0.47	0.47
5	Non moving items written off		1.72	1.72
6	Write off of deferred revenue expenditure		0.68	0.68
7	Compensation for injuries, death and damages to staff	1.69	1.05	1.05
8	Compensation for injuries, death and damages to outsiders	2.29	2.69	2.69
9	Other Expenses	0.94		
10	**Other Expenses Total**	**4.92**	**14.46**	**9.28**

3.12 RLC Refund

MSEDCL, in Page No. 35 of its Petition, submitted that it has refunded Rs 496 Crore during FY 2008-09.

The Commission observed that the amount indicated in the Petition does not tally with the amount indicated in Form 9. The initial query raised by the Commission and reply of MSEDCL in this regard are reproduced below:

> *"MSEDCL should reconcile the difference between RLC Refund as submitted in Form F-9 and Table-1 at Page No. 35 of the Petition.*
>
> *MSEDCL Reply:*
>
> *MSEDCL informs the Hon'ble Commission that, the Refund of RLC as shown at Table-1 : Summary of Truing Up for FY 2008-09 ,at page 33 of the Petition is Rs. 496 crore, however amount of RLC refund as per audited account is Rs.455 Crores. Further, MSEDCL informs that the RLC amount refunded to consumers of Bhiwandi DF area is not appearing in the Audited Accounts, hence the RLC amount refunded to Bhiwandi consumers amounting to Rs.41 Crore is also*

included in truing up as this amount is actually refunded, hence the total amount is Rs. 496 crore."

Based on the above reply of MSEDCL, the Commission raised a further query, which has been reproduced below, along with MSEDCL's reply in this regard:

"

a) MSEDCL should submit documentary proof for refund of RLC amount of Rs 41 Crore to consumers of Bhiwandi DF area, which is not appearing in the Audited Accounts.

MSEDCL Reply to query 8(a)

MSEDCL informs the Hon'ble Commission that, RLC refund to consumers of Bhiwandi DF area us Rs. 4.17 crore, the amount of Rs 41.7 as provided in reply to Query no. 5(a) of the data gaps was a typographical error. The month wise RLC refund of Bhiwandi circle is as given below:

Month	RLC Refund Amount (Rs.)
Nov-08	31,60,088.74
Dec-08	2,36,23,737.24
Jan-09	50,05,302.50
Feb-09	50,06,076.44
Mar-09	50,03,667.45
Total	**4,17,98,872.37**

MSEDCL informs the Hon'ble Commission that the RLC refund amounts now stands corrected to Rs. 459.17 crore.

b) MSEDCL should clarify as to under which head of accounts is the RLC refund of Rs. 41 crore booked under the Audited Accounts of MSEDCL.

MSEDCL Reply to query 8(b)

MSEDCL informs the Hon'ble Commission that, RLC refund of Rs. 4.17 crore to consumers of Bhiwandi DF area has not been accounted for in the audited Accounts of MSEDCL , as the same has been accounted for by Bhiwandi DF.

"

As seen from MSEDCL's above replies, the amount claimed to have been paid to consumers in Bhiwandi Distribution Franchisee (DF) area has been revised by MSEDCL from Rs. 41.7 crore to Rs. 4.17 crore. Further, the Commission does not find any merit in MSEDCL's contention that the amount paid out to consumers in Bhiwandi Distribution Franchisee (DF) area has not been accounted in the Audited Accounts of MSEDCL, and the same has been accounted for by Bhiwandi DF, since, any expense incurred by MSEDCL has to reflect in MSEDCL's accounts. Since, MSEDCL's Accounts indicate RLC refund of Rs. 455.36 crore only, the Commission has allowed Rs 455.36 Crore under this head.

3.13 Provisioning for Bad Debts

In the APR Order for FY 2008-09, the Commission had allowed provisioning for bad debts to the extent of 1.5% of revenue, which worked out to Rs 312 Crore. In the APR Petition, MSEDCL submitted that it has actually provided for bad debts to the extent of Rs 352 Crore.

For the purposes of truing up for FY 2008-09, the Commission has considered provisioning for bad debts as 1.5% of the revenue from sale of electricity, which works out to Rs 342 Crore.

3.14 Contribution to Contingency Reserves

MSEDCL submitted that the contribution to contingency reserves for FY 2008-09 has been considered as Rs 27 Crore, in accordance with the MERC Tariff Regulations, as approved by the Commission in the APR Order.

The MERC Tariff Regulations stipulate that the amount appropriated under contingency reserve 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 documentary evidence from MSEDCL to confirm that the contingency reserve has been invested in the approved securities. In reply, MSEDCL submitted documentary evidence to prove that the contingency Reserve amounting to Rs. 27 Crore had been invested in prescribed securities.

Hence, the Commission has accepted the contribution to contingency reserves, as submitted by MSEDCL.

3.15 Prior Period Charges

MSEDCL submitted that prior period charges for FY 2008-09 amounted to Rs 25.14 Crore, and submitted the break-up of the same under prior period income and prior period expenses/debits.

The Commission observed that MSEDCL has claimed 'Depreciation under provided in previous years' and 'Short provision for Income Tax in previous years', amounting to Rs 25.94 Crore. It may be noted that the depreciation is allowed by the Commission as per depreciation rates provided in MERC Tariff Regulations and not as per rates used in MSEDCL's Accounts. Hence, any such under-provisioning under this head cannot be allowed to be recovered from consumers.

As regards 'Short provision for Income Tax in previous years', the Commission observed that MSEDCL has not paid any income tax in the previous year/s and hence, this expense cannot be recovered from consumers.

The disallowance of these two expenses completely offsets the expenditure claimed by MSEDCL, and hence, no expenditure has been allowed under the truing up exercise under this head.

3.16 Return on Equity (RoE)

MSEDCL submitted that it has computed return on equity in accordance with the MERC Tariff Regulations, and claimed return on equity of Rs 550 Crore for FY 2008-09 as against RoE of Rs 510 Crore approved by the Commission in the APR Order dated August 17, 2009.

MSEDCL, in its Petition submitted that it has considered opening equity as per the audited accounts of FY 2008-09 of MSEDCL, as Rs. 3211.36 Crore, and claimed Return on Regulatory equity as Rs.550.40 Crore as per MERC Tariff Regulations .

MSEDCL submitted that equity contribution made for Capital Expenditure is funded through internal accruals and Government of Maharashtra equity infusion of Rs. 207.8 Crore. MSEDCL submitted that infusion of equity by GoM has resulted in equity portion of capitalisation as 47% of total capital expenditure. MSEDCL submitted that excess portion of equity may be treated as normative debt, with an interest rate of 11%.

As discussed earlier in this Section, MSEDCL re-submitted its funding pattern in reply to the Commission's queries in this regard, and the Commission has re-computed approved funding pattern based on approved capitalisation and funding pattern submitted by MSEDCL.

The Commission has computed the RoE for FY 2008-09 @ 16% on the opening balance of equity as well as equity component of the assets capitalised during the year in accordance with MERC Tariff Regulations. Accordingly, approved Return on Equity for FY 2008-09 is summarised in the following Table:

Table: Return on Equity approved by the Commission (Rs Crore)

Particulars	APR Order	Actual	Allowed after truing up
Regulatory Equity at beginning of year	3108.63	3211.41	3108.63
Equity Portion of Capitalisation	52.33	514.46	76.56
Regulatory Equity at the end of the year	3160.97	3725.87	3185.19
Return on Regulatory Equity at beginning of year	505.76	513.83	497.38
Return on Equity Portion of Capital Expenditure Capitalised	4.19	26.49	6.13
Return on excess portion of equity	0.00	10.08	0.00
Total Return on Regulated Equity	**509.94**	**550.40**	**503.51**

3.17 Income Tax

MSEDCL has not paid any income tax for FY 2008-09, and hence, no income tax expense has been considered under the truing up exercise.

3.18 Non Tariff Income

MSEDCL submitted that the actual non-tariff income of MSEDCL during FY 2007-08 was Rs 1315.37 Crore as compared to Rs 964 Crore approved by the Commission in the APR Order. The Commission has accepted the submission of the MSEDCL, under this head.

3.19 Revenue from Sale of Power

MSEDCL has submitted revenue from sale of power as Rs 22776 Crore, as against Rs 21959 Crore approved by the Commission in its previous APR Order. The Commission has accepted revenue from sale of power as submitted by MSEDCL.

3.20 Sharing of Efficiency Gains and Losses for FY 2008-09 due to Controllable Factors

MSEDCL categorised all the expenditure as uncontrollable and hence, did not compute the gains and losses for other controllable heads of expenditure. 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, particularly when this a regulated business, and the actuals have 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

The actual A&G and R&M expenditure have been higher than that allowed by the Commission in the APR Order, which has been considered as efficiency loss and shared in accordance with the MERC Tariff Regulations as reproduced above. One-third of the efficiency loss has been passed on to the consumers through increase in the trued up ARR of FY 2008-09 and the balance amount of the efficiency loss has to be absorbed by MSEDCL. The summary of sharing of efficiency gain is shown in the Table below.

Table: Sharing of Efficiency Losses under O&M expenses (Rs. Crore)

Sl.	Particulars	APR Order	MSEDCL APR Petition	Approved after Truing up	Efficiency Gain/ (Loss)	Efficiency Gain/ (Loss) shared with consumers	Net Entitlement
1	Administration & General Expenses	201.00	317.54	232.09	(85.45)	(28.48)	260.57
2	Repair & Maintenance Expenses	458.00	598.78	458.22	(140.56)	(46.85)	505.08

Interest on Working Capital

As discussed in the above paragraphs, the actual interest on working capital incurred by MSEDCL during FY 2008-09 is Rs. 71.67 crore, as against 'Nil' normative interest on working capital approved by the Commission considering other elements of expenses as approved after truing up. As stated earlier, the Commission has considered the difference between the actual interest on working capital and normative interest, amounting to Rs. 71.67 Crore, as an efficiency loss and shared the same between MSEDCL and the consumers in accordance with the MERC Tariff Regulations. Thus, Rs. 23.89 crore (1/3rd of Rs. 71.67 crore) has been passed on to the consumers through increase in tariff, and the balance amount of the efficiency loss has to be absorbed by MSEDCL

Distribution Loss Achievement

MSEDCL has computed the distribution loss in FY 2007-08 as 21.98% and submitted that over-achievement of 0.02% translates to revenue of Rs. 66.22 Crore. MSEDCL submitted that 2/3rd of this amount, i.e., Rs. 44.14 crore, should be provided in the revenue requirement of FY 2008-09, since MSEDCL was entitled to retain 1/3rd and 1/3rd would be passed on to the special reserve.

As discussed earlier in this Section, the Commission has re-computed the distribution loss achieved by MSEDCL as 22.24 % in FY 2007-08, as compared to the trajectory of 22.2% specified by the Commission in the MYT Order for MSEDCL, in Case No. 65 of 2006. Thus, there is an efficiency loss rather than efficiency gain, which has to be shared between MSEDCL and the consumers in accordance with the MERC Tariff Regulations, as reproduced above.

The Commission has computed the efficiency losses by considering the lower sales as a result of the higher distribution loss, at the actual average billing rate of MSEDCL in FY 2008-09, as shown in the Table below:

Table: Computation of Efficiency Loss due to higher distribution losses (Rs. Crore)

Particulars	Units	Amount
Normative distribution losses	%	22.20%
Actual distribution losses	%	22,24%
Actual Energy Input	MU	74809
Normative sales considering actual energy input	MU	58201
Actual sales	MU	58171
Additional/(Lower) sales due to higher distribution loss	MU	(30.40)
Average Billing Rate	Rs/kWh	3.93*
Additional/(Lower) revenue due to higher distribution loss	Rs. Crore	(11.94)
Efficiency Loss to be borne by MSEDCL	Rs. Crore	7.96
Efficiency Loss passed on to consumers	Rs. Crore	3.98

Note: * Based on 'Revenue from Sale of Power' as per Schedule 14 of Audited Accounts of MSEDCL excluding Standby Charges, Miscellaneous charges from consumers, wheeling charges and theft recovery income.

Total Addition to Revenue Requirement on account of Efficiency Losses

Based on the above computations, the total addition to the revenue requirement on account of sharing of efficiency losses between MSEDCL and the consumers, works out as under:

(Rs. Crore)

Sl.	Particulars	Amount
1	Administration & General Expenses	28.48
2	Repair & Maintenance Expenses	46.85
3	Interest on Working Capital	23.89
	Sub-total	**99.23**
4	Efficiency losses on account of distribution losses	3.98

Sl.	Particulars	Amount
5	**TOTAL**	**103.21**

3.21 Aggregate Revenue Requirement and Revenue Gap for FY 2008-09 after truing up

The Aggregate Revenue Requirement for FY 2008-09 after final truing up is summarised in the Table below. It may be noted that under the final truing up exercise, all the heads that have been considered under the provisional truing up for FY 2008-09 in the APR Order have been considered, in order to ensure that the computations are on the same footing and based on the same assumption. Accordingly, the surplus amounts for FY 2001-02 (Rs. 469 Crore) and FY 2006-07 (Rs. 214 Crore), as well as the State Government support for costly power purchase of Rs. 200 Crore, and the Pending Claims of FAC interest (Rs. 12 Crore) have been considered under the final truing up, since the truing up is with respect to the assumptions considered in the base Order, which is the APR Order for FY 2008-09, in this case.

Table: Aggregate Revenue Requirement for FY 2008-09 after Final Truing Up

(Rs. Crore)

Sl.	Particulars	FY 2008-09		
		APR Order	Audited	Allowed after Final Truing up
1	Power Purchase Expenses	17774	18054	18054
2	Operation & Maintenance Expenses			
2.1	*Employee Expenses*	*2276*	*2486*	*2486*
2.2	*Administration & General Expenses*	*201*	*318*	*232*
2.3	*Repair & Maintenance Expenses*	*458*	*599*	*458*

Sl.	Particulars	FY 2008-09		
		APR Order	Audited	Allowed after Final Truing up
3	Depreciation, including AAD	400	466	408
4	Interest on Long-term Loan Capital	238	370	237
5	Interest on Working Capital, consumer security deposits and Finance Charges	258	243	195
6	Provision for Bad Debts	312	352	342
7	Other Expenses	5	14	9
8	Income Tax	0	0	0
9	Transmission Charges paid to Transmission Licensee	1744	1739	1739
10	Contribution to contingency reserves	27	27	27
11	Incentive for FY 2008-09 for reduction in Distribution Losses	0	44	0
12	Incentives/Discounts	77	148	148
13	Interest on Working Capital required on account of REC short term loan	0	24	0
14	Sharing of Gains and Losses			103
15	**Total Revenue Expenditure**	**23772**	**24885**	**24440**
16	Return on Equity Capital	510	550	504
17	**Aggregate Revenue Requirement**	**24281**	**25435**	**24943**
18	Less: Non Tariff Income	(964)	(1315)	(1315)
19	Less: Income from wheeling charges	(6)	(15)	(15)
20	Less: Amount given by the State Government to meet power purchase expenses	(200)	(200)	(200)
21	Add Net Prior Period Charges		25	0
22	RLC Refund	500	496	455

Sl.	Particulars	FY 2008-09		
		APR Order	**Audited**	**Allowed after Final Truing up**
23	Pending Claims-FAC Interest	12	0	12
24	Truing up for FY 2001-02	(469)	0	(469)
25	Truing up for FY 2006-07	(214)	0	(214)
26	**Aggregate Revenue Requirement from Retail Tariff**	**22940**	**24426**	**23197**
27	**Revenue from Sale of Power**	**21959**	**22776**	**22776**
28	**Revenue Gap**	**981**	**1650**	**421**

The revenue gap of Rs. 421 Crore has been included while computing the consolidated revenue requirement for FY 2009-10, as elaborated in Section 4 of this Order.

As evident from the above Table, while calculating the truing up requirement, MSEDCL has considered revenue gap approved by the Commission as Rs 1652 Crore, whereas the Commission in its APR Order dated August 17, 2009, allowed a revenue gap of Rs 981 Crore. This difference is primarily because of non-consideration of FAC interest and revenue surplus determined for FY 2001-02 and FY 2006-07. This error by MSEDCL has led to under-statement of its revenue gap by Rs 669 Crore.

The Aggregate Revenue Requirement for FY 2008-09 may appear significantly lower than that projected by MSEDCL, primarily due to the following reasons:

- Reduction in O&M expenses, in accordance with the Commission's philosophy as regards allowance of controllable expenses like employee expenses, A&G expenses and R&M expenses.
- Reduction in proposed capitalisation and consequent reduction in interest expenses, depreciation, Other Interest and Financing charges, and return on equity components.
- Disallowance of RLC refund of Rs 41 Crore, as sought by MSEDCL, pertaining to Bhiwandi DF, which was subsequently re-stated as Rs. 4.17 crore.

- The pending claim of FAC interest has not been considered by MSEDCL while computing the revenue requirement, though the same had been considered by the Commission at the time of provisional truing up for FY 2008-09. The Commission has considered the same, and the ARR has been increased to this extent, under the final truing up exercise; hence, this benefits MSEDCL.
- The revenue surplus considered by the Commission after final truing up for FY 2001-02 (Rs. 469 Crore) and FY 2006-07 (Rs. 214 Crore) has not been considered by MSEDCL while computing the revenue requirement, though the same had been considered by the Commission while determining the tariffs for FY 2008-09.
- MSEDCL has claimed sharing of efficiency gains for reduction in distribution loss over and above normative distribution loss. However, the Commission has re-computed the distribution loss and the efficiency losses have been shared in accordance with MERC Tariff Regulations.
- The Commission has not allowed Prior period charges, as MSEDCL has claimed actual expenses against the practice of allowing depreciation expenses on normative basis at the rates specified under the MERC Tariff Regulations, and also claimed provisioning for Income-tax, when it has not paid income-tax.

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

4.1 Performance Parameters

Regulation 16.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005, 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."*

4.1.1 Distribution Loss

The actual level of distribution loss achieved by MSEDCL in FY 2006-07 was 30.2%, which becomes the opening level for the MYT Control Period from FY 2007-08 to FY 2009-10. The Commission directed MSEDCL to reduce the distribution losses by 4% during each year of the Control Period, through a combination of reduction of both commercial and technical losses. Thus, considering a loss reduction of 4% each in FY 2007-08, FY 2008-09 and FY 2009-10 as stipulated in the MYT Order, the distribution loss level to be considered for FY 2009-10 works out to 18.2%.

In its APR Petition, MSEDCL submitted that it was aggrieved by the decision of the Commission in its previous APR Order wherein, the Commission had directed MSEDCL to reduce the distribution losses by 4% during FY 2009-10 and had also determined the tariff for FY 2009-10 assuming 4% reduction in distribution losses. In addition, MSEDCL submitted that it has preferred an appeal before the ATE on this issue and without prejudice to its right to contest the issue before the appropriate forum, MSEDCL has considered a realistic loss reduction target of 1% for FY 2009-10 over actual loss levels of FY 2008-09, thus, considering a distribution loss of 20.98% for estimating Energy Balance of FY 2009-10.

As regards distribution loss for FY 2010-11, MSEDCL proposed a distribution loss reduction by 1% over revised estimate of FY 2009-10, thus. considering a distribution loss of 19.98% for estimating Energy Balance of FY 2010-11.

In this context, during the public regulatory process on MSEDCL's APR Petition, several consumers and Consumer Representatives objected to MSEDCL's proposal to reduce distribution losses by only 1% in FY 2009-10 and FY 2010-11, and suggested that the distribution loss reduction trajectory should be retained at 4%.

It should be noted that the distribution loss trajectory specified by the Commission for MSEDCL vide its MYT Order dated May 18, 2007 issued by the Commission in Case No. 65 of 2006 has neither been challenged nor set aside by any higher Court, and is hence, still applicable and valid. The distribution loss reduction of 4% considered in the APR Order for FY 2008-09 dated August 17, 2009, was only a reiteration of the loss reduction trajectory for the first Control Period that has attained finality, since the same has not been challenged or set aside by any appellate authority/Court.

Moreover, MSEDCL has also submitted that overall loss level in FY 2008-09 was lower than the normative level of 22.20%, and has claimed incentive to the extent of around Rs. 44 crore on this account, as elaborated in Section 3 of the Order. It may also be noted that though MSEDCL has submitted in its Petition that it has assumed a 'realistic loss reduction target' of 1% in FY 2009-10, MSEDCL in its reply to queries raised by Prayas Energy Group (PEG) during the TVS, submitted that provisional distribution loss till December 2010 is 19.52%.

Further, though MSEDCL reported overall distribution losses of 21.98% in FY 2008-09, based on data submitted by MSEDCL, it is apparent that there are still several Circles, where the distribution loss levels are quite high, as summarised in the Table below:

Table: Circle-wise Distribution Losses in FY 2008-09

Sl.	Distribution losses	Number of Circles	Percentage of Circles
1	>40%	3	7%
2	> 35%	6	14%
3	> 30%	11	25%
4	> 25%	17	39%

As seen from the above summary, there are 17 Circles out of the total 44 Circles, i.e., 39% of the Circles, where the distribution losses are higher than 25%. Similarly, 11 out of the 44 Circles (25%) have distribution losses are higher than 30%, and so on. There are around 140 Divisions in MSEDCL licence area, and each of these Circles consists of 3 to 4 Divisions. Hence, there will be even more number of Divisions, where the distribution losses are higher than 25% to 30%, which only proves that there is still ample scope for reduction of distribution losses by MSEDCL.

It should also be noted that most of the DISCOMs in the States of Gujarat and Andhra Pradesh, which are States comparable to Maharashtra, had much lower distribution losses in FY 2009-10. Considering the capital expenditure planned by MSEDCL and the cost-benefit analysis indicated by MSEDCL while seeking in-principle approval of the capital expenditure schemes, the Commission is of the view that it should have been possible for MSEDCL to reduce the distribution losses to 18.2% in FY 2009-10.

For FY 2010-11, the Commission has accepted loss reduction target of 1%, as submitted by MSEDCL, and hence, the target distribution losses for FY 2010-11 have been stipulated at 17.2%.

4.2 Provisional Truing-up for FY 2009-10

MSEDCL, in its APR Petition for FY 2009-10 and ARR and Tariff Petition for FY 2010-11, submitted the performance for FY 2009-10 based on actual performance for the first half of the year, i.e., April to September 2009, and estimated performance for the second half of the year, i.e., October 2009 to March 2010. MSEDCL submitted the comparison of each element of expenditure and revenue with that approved by the Commission in its Order dated August 17, 2009 on MSEDCL's Annual Performance Review for FY 2008-09 and Tariff Determination for FY 2009-10.

The Commission will undertake the final truing up of the revenue requirement and Revenue for FY 2009-10 once the audited accounts of MSEDCL for FY 2009-10 are available. However, the Commission in this Order on APR for FY 2009-10 and determination of ARR and tariff for FY 2010-11 has considered provisional truing up of certain elements of the revenue requirement and revenue, in cases where the impact is very high, or there is a change in principles/methodology, and due to revision in capital expenditure/capitalisation figures. The revised estimate of performance of MSEDCL during FY 2009-10 as compared to the Commission's APR Order for MSEDCL and the estimates of performance for FY 2010-11 are 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 only after the audited expenses and revenue are available. Further, for computing sharing of efficiency gains/losses for FY 2009-10, the revised expenses approved for FY 2009-10 in this Order under the provisional truing up exercise will be considered as base expenses and revenue.

4.3 Sales

MSEDCL submitted that the past five years' Compounded Annual Growth Rate (CAGR) has been considered as the basis for the sales projection, which is also the methodology adopted by the Central Electricity Authority (CEA) in the 17th Electric Power Survey (EPS). MSEDCL added that the above sales projections cover only the restricted sales, and as MSEDCL is sourcing all the power available to mitigate the load shedding to the extent possible, there was some additional energy available for sales. Therefore, MSEDCL assumed that additional energy is available for consumption by the consumers in LT categories, who are the primary sufferers of load shedding. The additional energy available has been allocated to the LT categories, except LT un-metered agricultural category, in proportion to the actual consumption mix.

Based on the methodology adopted by the Commission in previous Orders, MSEDCL has computed consumption of un-metered agriculture consumers for FY 2009-10 as 7069 MU. MSEDCL submitted that it has considered that LT IV Agriculture (Un-metered) consumption would remain same for FY 2007-08, FY 2008-09 and FY 2009-10, since, MSEDCL has stopped extending un-metered connections and moreover, higher growth rate has been considered for LT IV Agriculture (Metered) category as new agricultural connections to the tune of 1.2 Lakhs per year are being added. While detailing the projected consumption by LT IV un-metered agricultural category, MSEDCL submitted that consumption under such category would remain same for FY 2009-10 and FY 2010-11.

In its APR Petition, MSEDCL projected the sales to HT category for FY 2009-10 and FY 2010-11 as 28593 MU and 31245 MU, respectively. The sales of LT category for FY 2009-10 and FY 2010-11 have been projected as 34518 MU and 38718 MU, respectively. The total sales projected by MSEDCL for FY 2009-10 and FY 2010-11, is 63111 MU and 69963 MU, respectively, as compared to actual sales of 58171 MU in FY 2008-09.

For FY 2009-10, the Commission obtained the details of provisional actual category-wise sales for the period from April 2009 to March 2010 from MSEDCL, which has been indicated as 64166 MU. This includes the sales to Bhiwandi franchisee area. However, MSEDCL submitted that un-metered agricultural consumption has increased from earlier projected sales of 7069 MU to 7653 MU, for FY 2009-10. The Commission also observed that increase in actual sales to LT IV Agriculture Metered as compared to revised estimates submitted by the MSEDCL in its Petition, is around 200 MU, whereas increase in sales from revised estimates for LT IV Agriculture Unmetered Category is around 600 MU, and no rationale has been submitted for the same. Hence, for FY 2009-10, the Commission has approved sales of LT IV Agriculture Unmetered category at FY 2008-09 levels, since the consumption of un-metered category cannot increase, with all new connections being given on metered basis only, and existing un-metered consumers also moving to metered category.

For FY 2010-11, the Commission has generally considered the 3-year and 5-year CAGR of sales for each category as appropriate, by considering the period from FY 2004-05 to FY 2009-10. For some categories like HT IV PWW and LT IV agricultural metered category, the Commission has considered the year-on-year growth rate for projection purposes, since they appeared to be more representative. The sales to LT un-metered agriculture category has been considered as 7069 MU in FY 2010-11, at the same level as reported by MSEDCL for FY 2008-09.

The Commission observed that MSEDCL has not reduced sales on account of Zero Load Shedding (ZLS) scheme, and used entire sales of MSEDCL for purpose of calculation of revenue from sale of power at existing tariff. The Commission has however, considered the effect of ZLS scheme by pro-rata adjustment in sales of the categories benefitting from this scheme, since neither the power purchase quantum and cost nor the sales quantum and revenue of the ZLS scheme should be considered for the purpose of tariff determination.

Based on the projected supply availability and projected sales based on past trends, which reflect the restricted sales, on account of the load shedding being done in MSEDCL licence area, there is some surplus quantum available. Since, such surplus energy will obviously be sold to the consumers in the State by reducing the load shedding, the Commission has computed the additional revenue that can be earned through this additional sale by apportioning the additional energy availability primarily to the LT consumer categories (and HT V and Mula Pravara, since they are also affected by load shedding) in proportion to the consumption mix, since they are affected by load shedding..

The category-wise sales projected by MSEDCL and approved by the Commission in this Order are given in the Table below:

Table: Category-wise Approved Sales (MU)

Category	**FY 2008-09**	**FY 2009-10**				**FY 2010-11**	
	Approved	**APR Order**	**Revised Estimates**	**Provisional Actuals**	**Approved after Provisional Truing-up**	**MSEDCL Petition**	**Approved**

Category	FY 2008-09	FY 2009-10				FY 2010-11	
	Approved	APR Order	Revised Estimates	Provisional Actuals	Approved after Provisional Truing-up	MSEDCL Petition	Approved
HT I- Industries	**21229**	**22646**	**22756**	**22345**	**22345**	**25024**	**25024**
A)Express Feeders	*13358*	*14086*	*14427*	*14630*	*14630*	*15581*	*15581*
B) Non Express Feeders	*7757*	*8435*	*8184*	*7588*	*7588*	*9265*	*9265*
C) Seasonal	*115*	*125*	*145*	*127*	*127*	*179*	*179*
HT Commercial	**874**	**1005**	**1535**	**1577**	**1577**	**1619**	**1619**
HTP III Railways	**1286**	**1355**	**1355**	**1275**	**1275**	**1427**	**1427**
HT IV-PWW	**1263**	**1353**	**1343**	**1474**	**1474**	**1417**	**1621**
HT IV- PWW (Express Feeders)	*917*	*982*	*1001*	*1050*	*1050*	*1022*	*1164*
HT IV-PWW (Non Express Feeders)	*346*	*371*	*342*	*424*	*424*	*395*	*457*
HT V Agricultural	**524**	**551**	**551**	**493**	**493**	**564**	**496**
HT VI	**453**	**483**	**395**	**673**	**673**	**529**	**756**
Group Housing Society	*361*	*385*	*393*	*669*	*669*	*421*	*754*
Commercial Complex	*92*	*98*	*2*	*4*	*4*	*108*	*1*
HT VII -MPECS	**655**	**655**	**660**	**743**	**743**	**665**	**743**
HT Total	**26284**	**28048**	**28595**	**28578**	**28578**	**31246**	**31685**
LT I Domestic	**10298**	**11326**	**11627**	**11563**	**11563**	**12967**	**12672**
LT I -BPL	*49*	*53*	*56*	*64*	*64*	*62*	*68*
LT I Domestic	*10248*	*11273*	*11571*	*11499*	*11499*	*12905*	*12604*
LT II -Non Residential or Commercial	**2706**	**3062**	**3120**	**3158**	**3158**	**3509**	**3902**
LT III PWW	**478**	**487**	**499**	**475**	**475**	**508**	**591**

Category	FY 2008-09	FY 2009-10				FY 2010-11	
	Approved	APR Order	Revised Estimates	Provisional Actuals	Approved after Provisional Truing-up	MSEDCL Petition	Approved
LT IV Metered	**5145**	**5845**	**5507**	**5775**	**5775**	**6922**	**6986**
LT V Industrial	**5310**	**5828**	**5728**	**6084**	**6084**	**6700**	**6589**
LT VI Streetlight	**696**	**732**	**751**	**716**	**716**	**789**	**732**
LT VII- Temporary Connection	**177**	**266**	**213**	**160**	**160**	**248**	**248**
LT VIII Advertisement & Hoardings	**3**	**3**	**3**	**2**	**2**	**4**	**4**
Shopping Malls	**4**						
LT IX – Crematoriums & Burial Grounds	**1**	**1**	**0**	**1**	**1**	**1**	**1**
LT Total	**24817**	**27550**	**27448**	**27934**	**27934**	**31649**	**31726**
Total MSEDCL Metered Sales	**51102**	**55598**	**56043**	**56513**	**56513**	**62894**	**63411**
LT Ag Unmetered	**7069**	**7097**	**7069**	**7653**	**7069**	**7069**	**7069**
Total MSEDCL Sales	**58171**	**62696**	**63111**	**64166**	**63582**	**69963**	**70480**

Thus, the total sales approved by the Commission for FY 2009-10 and FY 2009-10 is 63582 MU and 70480 MU, respectively, as compared to MSEDCL's estimate of 63111 MU and 69963 MU, respectively, in its APR Petition.

4.4 Distribution Losses and Energy Balance

As discussed earlier, the Commission has approved the distribution losses for FY 2009-10 and FY 2010-11 as 18.20% and 17.20%, respectively, as compared to MSEDCL's projections of 20.98% and 19.98 % FY 2009-10 and FY 2010-11, respectively. For FY

2009-10, for the purpose of provisional truing up, the distribution loss of 20.12% indicated in subsequent submission by MSEDCL has been considered, however, the efficiency loss on this account has not been computed, and will be done at the time of final truing up. Thus, the total power purchase requirement of MSEDCL in FY 2010-11 has been approved as 90793 MU, as elaborated in the Table below and the subsequent paragraphs, based on the energy balance and after considering inter-State and intra-State losses as applicable on the power purchase quantum.

Table: Energy Balance for FY 2009-10 and FY 2010-11

Particulars	Units	FY 2009-10		FY 2010-11	
		MSEDCL	**Provisional Approval**	**MSEDCL APR Petition**	**Approved**
Purchase from MSPGCL	MU	46,720	46,564	47,995	50490
Purchases from other sources within the State	MU	11270	11412	18,182	16,880
Total Purchase from within the State	**MU**	**57,990**	**57,976**	**66,177**	**67,370**
Effective gross purchase from outside the State	**MU**	**27,272**	**27,498**	**27,022**	**23,423**
Central Generating Station	MU	23,667	23,820	24,192	22,548
UI	MU	461	549	100	0
Kawas/ Gandhar/ Traders	MU	3,144	3,129	2,730	875
Inter-State transmission losses	%	4.85%	6.60%	4.85%	5.69%
Net purchase from outside the State	MU	25,949	25,682	25,711	22,090
Total Power Purchase payable	**MU**	**85,262**	**85,474**	**93,199**	**90,793**
Energy at Transmission Periphery	MU	83,939	83,658	91,889	89,460
Intra- State Losses	**%**	**4.85%**	**4.85%**	**4.85%**	**4.85%**
Energy at Distribution Periphery	MU	79868	79601	87432	85121
Distribution losses	**%**	**20.98%**	**20.12%***	**19.98%**	**17.20%**
Energy available for Sales	**MU**	**63111**	**63582**	**69963**	**70480**

Note: *Sharing of gain and losses will be done at the time of final true up of FY 2009-10 , considering normative distribution loss of 18.20%.

4.5 Energy Availability and Power Purchase cost for FY 2009-10 and FY 2010-11

Total Power Purchase Quantum and Cost for FY 2009-10

MSEDCL, in its APR Petition, projected power purchase expenses from MSPGCL based on actual generation, monthly Fixed Charges and Variable Charges for the period from April 2009 to December 2009. MSEDCL submitted that for the purposes of projection, it has extrapolated energy availability and power purchase expenses for the remaining three months, i.e., from January 2010 to March 2010, on pro-rata basis.

As regards purchase of power from the Central Generating Stations (CGS), MSEDCL submitted that it has a firm share allocation for drawal of power from some of the National Thermal Power Corporation (NTPC) stations. In addition to the firm share allocation, most of these stations have 15% unallocated power, which is distributed among the beneficiaries. However, MSEDCL submitted that such share from Eastern Region Stations (Except Kahalgaon II) has been discontinued from September 2009 and hence, no power has been projected by MSEDCL from September 2009 onwards in case of Farakka, Talcher and Kahalgaon I Stations.

MSEDCL submitted that it has considered fixed charges and variable charges including Fuel Price Adjustment (FPA) for CGS on the basis of Central Electricity Regulatory Commission (CERC) Order for FY 2008-09, as CERC has not yet finalized tariff for FY 2009-10 and it is difficult to accurately estimate fixed charges and energy charges. MSEDCL stated that the Commission has allowed MSEDCL in the Tariff Order dated August 17, 2009, to recover the changes in variable cost of power through FAC and the fixed cost would have to be adjusted at the time of truing up for 2009-10. However, since the amount of differential fixed charges would be substantial; being revision of bills for nearly one year and adjustment of this amount in truing up will take 1-1/2 years, it will affect MSEDCL's cash flow adversely. MSEDCL therefore, requested to allow to recover this fixed charges also through FAC in the year in which it is paid, or in the alternative, permit to recover the same by way of an "additional charge" sufficient to compensate the impact of revision in tariff for FY 2009-10.

Further, MSEDCL submitted that it has estimated incentive for Korba, VSTPS I, II and III, and Sipat stations for the projected generation above 80% PLF, in accordance with the norms specified in CERC Regulations.

For FY 2009-10, the Commission obtained the details of the source-wise actual power purchase quantum and cost and has accordingly considered the same. However, the Commission observes that MSEDCL has considered power purchase cost for power purchased for the Interim Franchisees though it has not considered the quantum of power purchased for the Interim Franchisees for FY 2009-10, in Form-2 of its APR Petition. As regards the purchase of power under the Interim Franchisee arrangement, there is a separate mechanism to recover the power purchase expense from the consumers of such Franchisee area through levy of Reliability Charges, and accordingly, the Commission has not considered the quantum and power purchase cost towards such purchases.

The summary of the actual power purchase quantum and expense as submitted by MSEDCL and as approved by the Commission after provisional truing up for FY 2009-10 is shown in the Table below:

Table: Summary of Power Purchase for FY 2009-10

Particulars	Actuals		Approved	
	Quantum	Total Cost	Quantum	Total Cost
	MU	Rs Crore	MU	Rs Crore
MAHA GENCO	**46564**	**10777**	**46564**	**10777**
DODSON I	29	7	29	7
DODSON II	44	13	44	13
RGPPL	8105	3741	8105	3741
NCE	2818	1074	2818	1074
CPP	289	146	289	146
IPP - JSW				
IBSM	126	72	126	72
Other Sources within the State	**11412**	**5054**	**11412**	**5054**
KSTPS	5467	539	5467	539
VSTP I	3572	578	3572	578
VSTP II	2882	552	2882	552
VSTP III	2468	530	2468	530

Particulars	Actuals		Approved	
	Quantum	Total Cost	Quantum	Total Cost
	MU	Rs Crore	MU	Rs Crore
KAWAS GAS	1472	456	1472	456
GANDHAR	1490	474	1490	474
FSTPP	103	30	103	30
KhTPS-I	35	11	35	11
KhTPS-II	533	135	533	135
TSTPS	57	12	57	12
Sipat TPS	2324	406	2324	406
NTPC	**20404**	**3724**	**20404**	**3724**
KAPP	310	67	310	67
TAPP 1&2	1136	109	1136	109
TAPP 3&4	1970	457	1970	457
NPCIL	**3416**	**633**	**3416**	**633**
CGS Stations	**23820**	**4356**	**23820**	**4356**
U.I. CHARGES	**549**	**6**	**549**	**6**
SSP	661	135	661	135
PENCH	130	27	130	27
Trading Company	942	668	942	668
Zero Load Shedding *				
IEX				
Other Sources from outside the State	**1732**	**830**	**1732**	**830**
Total PP from Outside State	**26101**	**5192**	**26101**	**5192**
Power Grid	0	350	0	350
Reactive Charges	0	-3	0	-3
Banking	-0.22	2	-0.22	2
Wheeling Charges	0	2	0	2
Total Power Purchase	**84077**	**21373**	**84077**	**21373**

*Power purchase quantum and cost related to Zero load Shedding has been reduced from Actuals for FY 2009-10.

Power Purchase Quantum and Cost for FY 2010-11

Total Power Purchase Quantum

Based on the projected sales and approved loss levels as discussed above, the total projected power purchase quantum for FY 2010-11 works out to 90793 MU.

Sources of Power Purchase

MSEDCL has three primary sources of firm power, viz.,

- Maharashtra State Power Generation Company Limited (MSPGCL)
- Purchase from Central Generating Stations (CGS)
- Ratnagiri Gas and Power Private Limited (RGPPL)

In addition to the above sources, MSEDCL buys power from Trading Companies, Indian Energy Exchange and Power Exchange, renewable energy sources including co-generation, wind power, and surplus power from captive plants.

The source-wise analysis for approving the power purchase quantum and cost for FY 2010-11 is detailed in the following paragraphs.

Power Purchase from MSPGCL

For FY 2010-11, MSEDCL has considered units to be purchased from MSPGCL as per MSPGCL's APR Petition for FY 2009-10, as 45120 MU for existing stations and 1380 MU for Parli (Unit 6) and 1495 MU for Paras (Unit 3) amounting to a total estimated purchase of 47995 MU. MSEDCL has considered the power purchase rate from existing stations as Rs 2.48/kWh and for Parli and Paras Units, the power purchase rate has been considered as per the respective Tariff Orders issued by the Commission. MSEDCL further submitted that power purchase from the new projects such as Khaparkheda, Bhusawal, Parli and Paras, which are being commissioned, has not been considered for projection of power purchase in FY 2010-11 and requested the Commission to pass through the entire cost of power purchase from new projects under the FAC mechanism. In addition, MSEDCL submitted that MSEDCL has not considered the impact of Rs 762.77 Crore which MSPGCL has been permitted to recover from MSEDCL in 12 equal instalments vide the Commission's Order dated March 5, 2010, since the same amount is proposed by MSEDCL to be recovered through FAC.

As regards power purchase from existing stations of MSPGCL, the Commission has considered the power purchase expenses based on the fixed and energy charges for 7 months as approved by the Commission in its Order in Case No. 102 of 2009 as on MSPGCL's APR Petition for FY 2009-10 and fixed and energy charges for 5 months as approved in Case No. 115 of 2008 on MSPGCL's APR Petition for FY 2008-09.

Further, the Commission in its Order in Case No. 16 of 2008 had allowed MSPGCL to recover arrears from MSEDCL in respect of truing up of previous years amounting to 762.77 Crore in 12 equal monthly instalments from March 2010 onwards. Hence, for the purpose of approving power purchase expenses of FY 2010-11, the Commission has considered the impact of such instalments for the 11 months falling in FY 2010-11, which amounts to Rs 699.21 Crore.

As regards power purchase from new Stations of MSPGCL, the Commission is of the view that Parli Unit No. 7 (250 MW) and Paras Unit No. 4 (250 MW) would be operating in their stabilization period in FY 2010-11. Thus, MSEDCL would be supplied by these Units for around 6 months in FY 2010-11, which is the Stabilisation period for such Units. Accordingly, the Commission has considered 50% of the projected energy availability during FY 2010-11 as submitted by the MSPGCL in the Tariff Petitions for these Units, under the power purchase basket of MSEDCL in FY 2010-11, which amounts to 795 MU and 793 MU from Parli Unit No. 7 and Paras Unit No. 4, respectively. Further, the Commission has considered the provisional Tariff applicable for the Stabilisation period of these Station as under:

Table: Provisional Tariff for Parli Unit 7 and Paras Unit 4

Particulars	**Fixed Charges**	**Variable Charges**
	Rs Crore/Month	**Rs/kWh**
Paras Unit 4	20.26	1.59
Parli Unit 7	18.41	1.84

The summary of approved power purchase from MSPGCL for FY 2010-11 is given in the Table below:

Table: Summary of Approved Power Purchase from MSPGCL for FY 2010-11

S.No	Stations	Quantum (MU)	Fixed Charges (Rs Crore)	Energy Charges (Rs Crore)	Total Cost (Rs Crore)
1	Existing Thermal Stations	48902.19	2338.18	7817.33	10155.51
2	Impact of Case 16 of 2008			699.21	699.21
	Total Existing Stations	**48902.19**	**2338.18**	**8516.53**	**10854.71**
3	Paras Unit No.4	792.50	121.57	126.34	247.91
4	Parli Unit No. 7	795.00	110.43	146.31	256.74
	Total New Stations	**1587.70**	**232.01**	**272.65**	**505.65**
	Total MSPGCL	**50489.69**	**2570.19**	**8789.18**	**11359.37**

Power Purchase from Central Generating Stations (CGS)-

MSEDCL has a firm share allocation for drawal of power from generating stations of National Thermal Power Corporation (NTPC) and three Nuclear Power Corporation (NPC) Stations. In addition to the firm share allocation, most of these stations have 15% unallocated power. The distribution of this unallocated power among the constituents of Western Region is decided from time to time based on power requirement and power shortage in different States.

MSEDCL, in its Petition, while projecting the energy available from CGS, considered the firm share in Central Generating Stations and its share in unallocated quota prevalent during earlier periods. MSEDCL has projected the quantum of power available from CGS by applying its effective share on projected Energy Sent Out from each Station. Further, MSEDCL has applied the external transmission losses and intra-State transmission losses to arrive at net energy available to MSEDCL.

MSEDCL has also submitted that it had not projected any power purchase from CGS from the eastern region, namely Kahalgaon Thermal Power Station, Farakka Super Thermal Power Station and Talcher Super Thermal Power Station, because the share of MSEDCL from the unallocated (15%) portion of these generating stations was discontinued from September 2009. MSEDCL submitted that it has considered the fixed and variable charges for CGS by considering a 5% increase in the actual tariff for FY 2009-10. MSEDCL also submitted that the fixed and variable charges are likely to be revised and recovery of any such upward revision of fixed charges for the Central Generating Stations should be allowed through the FAC mechanism.

MSEDCL has not projected any power procurement form the Eastern Region except from Kahalgaon II.

MSEDCL submitted that it has considered incentives for Korba, VSTPS I, II and III, and Sipat Stations for the projected generation above 80% PLF, in accordance with the norms specified in CERC regulation, as per earlier methodology. Since the projection is based on the old tariff, the Income tax is shown separately.

For projecting the energy availability from existing CGS Stations, the Commission has considered the annual generation target for CGS as specified by the Central Electricity Authority (CEA) for FY 2010-11. The energy sent out from these stations has been estimated by considering the actual auxiliary consumption achieved by these stations in FY 2008-09. For Western Region Stations, the Commission has considered the share from allocated quota based on latest allocation as on April 21, 2010 as specified in Western Region Power Committee notice dated June 21, 2010. Further, the Commission has considered energy availability from eastern region stations, namely Kahalgaon Thermal Power Station, Farakka Super Thermal Power Station and Talcher Super Thermal Power Station from the share of unallocated portion based on the latest allocation as on May 5, 2010 (as specified in Western Region Power Committee notice dated May 5, 2010). For Kahalgaon II STPS and TAPP 1 & 2 stations of NPCIL, the Commission has considered the energy availability as projected by MSEDCL.

The Commission has considered the fixed cost of existing NTPC Stations based on the latest CERC Orders for each Station for FY 2008-09. The Commission observes that while CERC has notified the CERC (Terms and Conditions of Tariff) Regulations, 2009 on January 19, 2009, CERC is yet to determine the tariff for Central Generating Stations till date. Hence, an escalation of 3% over the FPA charges for FY 2009-10 has been allowed to arrive at the FPA charges for FY 2010-11.

As regards MSEDCL's request that any variation in the tariff based on the CERC (Terms and Conditions of Tariff) Regulations, 2009 should be allowed as a pass through under the FAC mechanism, the Commission is of the view that any variation in the power purchase cost on account of change in the fixed cost would have to be adjusted at the time of the next tariff determination process and any change in the variable cost of power purchase from Central Generating Stations should be considered as a part of the FAC.

The Commission has also considered incentives for Korba STPS, Vindhyachal I STPS, Vindhyachal II STPS, Vindhyachal III STPS, Sipat STPS and Stations of Eastern Sector for the projected generation above 80% PLF, in accordance with the CERC norms specified in the earlier CERC (Terms and Conditions of Tariff) Regulations, 2004. The total incentive amount payable by MSEDCL to Central Generating Stations for FY 2010-11 is estimated at Rs. 39.59 Crore. Though the incentive methodology has been modified in the CERC (Terms and Conditions of Tariff) Regulations, 2009, the exact impact is not known at this stage and hence, the incentive has been considered as per the earlier methodology. The Commission has also considered the Income Tax payable by MSEDCL to Central Generating Stations for FY 2010-11 as Rs 162.63 Crore as projected by MSEDCL. Though in CERC (Terms and Conditions of Tariff) Regulations, 2009, CERC has changed the RoE mechanism from post-tax to pre-tax, however, the impact of the same cannot be assessed in absence of CERC Tariff Order based on new Regulations, hence, the income tax has been considered separately.

The summary of total quantum of Power Purchase (Energy Sent Out basis) and total power purchase cost from each CGS as estimated by MSEDCL in its Petition and as considered by the Commission for FY 2010-11, is given in the following Table:

Table: Power Purchase from Central Generating Stations Approved for FY 2010-11

Source	**MSEDCL**		**Approved**	
	Quantum (MU)	**PP Expenses (Rs. Cr)**	**Quantum (MU)**	**PP Expenses (Rs. Cr)**
KSTPS	5466	705	5096	587
VSTP I	3616	704	3395	488

Source	MSEDCL		Approved	
	Quantum (MU)	PP Expenses (Rs. Cr)	Quantum (MU)	PP Expenses (Rs. Cr)
VSTP II	2829	556	2652	501
VSTP III	2463	520	2211	520
KAWAS	1615	569	1345	321
GANDHAR	1576	615	1314	573
Farakka STPS	0	0	129	35
Kahalgaon STPS-I	0	0	61	19
Kahalgaon STPS-II	511	125	511	149
Talcher STPS	0	0	84	13
Sipat TPS	2616	565	2242	593
Total - NTPC	**20692**	**4358**	**19040***	**3799**
KAPP	346	75	368	80
TAPP 1&2	1206	115	1206	115
TAPP 3&4	1948	533	1934	529
Total - NPCIL	**3500**	**723**	**3507**	**725**

Note: * as per CEA target

Power Purchase from Sardar Sarovar Project (SSP) and Pench HPS

MSEDCL has submitted energy availability of 540 MU from Sardar Sarovar Project (SSP) for FY 2010-11 at a cost Rs 111 Crore. For determining the energy availability from SSP for FY 2010-11, the Commission has considered the annual generation target specified by CEA for FY 2010-11. The energy sent out from this station has been estimated by considering the capacity allocation as submitted by MSEDCL. Thus, the energy availability for FY 2010-11 works out to 635 MU. As regards the power purchase cost, the Commission is of the view that the tariff for SSP needs to be determined by CERC. In the absence of CERC's approval, the Commission has considered the energy tariff of Rs 2.05 per unit as currently being paid by MSEDCL. This rate shall prevail until such time CERC approves the tariff for SSP, and the Commission shall true-up for any variations in the subsequent years. Thus, the estimated power purchase cost for purchase of 635 MU from SSP works out to Rs. 130 Crore.

For power purchase from Pench HPS, the Commission has considered the energy availability projected by MSEDCL (240 MU) at a cost of Rs. 2.05 per unit with a total cost of Rs. 49 Crore.

Power Purchase from Ratnagiri Gas and Power Pvt. Ltd. (RGPPL)–

MSEDCL has projected power purchase from RGPPL based on the Tariff Petition submitted by RGPPL to CERC. RGPPL has projected energy generation of 11000 MU from its stations for FY 2010-11 in its Tariff Petition before CERC. The fixed cost considered by MSEDCL is Rs. 2.08 per unit and the variable cost is Rs. 2.18 per unit for FY 2010-11.

As regards the cost of power purchase from RGPPL, for the purpose of this Order, the Commission has considered the actual cost paid to RGPPL in FY 2009-10, as submitted by MSEDCL. However, the matter of RGPPL tariff as determined by the Central Electricity Regulatory Commission for this period is being agitated by RGPPL before the Appellate Tribunal for Electricity (ATE), and the matter is pending before the ATE, and hence, the Commission directs MSEDCL to submit the detailed analysis of impact of APTEL Judgment and relevant CERC Orders pertaining to RGPPL, in the next tariff determination process.

It may be noted that, CERC has recently brought out its Order specifying the fixed cost and variable cost of RGPPL stations from FY 2009-10 to FY 2013-14 (Petition No 283 of 2009, dated August 18, 2010). In this Order, CERC has reduced the approved installed capacity of RGPPL as 1967 MW for the purpose of tariff determination. Also it has approved the annual generation target of 11000 MU at a reduced PAF 66.72%. The relevant extract of the order is as under:

"29. In view of our observations in para 25 above and in exercise of our power under Regulation 44 of 2009 regulations, we are relaxing the norms of NAPAF for gas based generating stations as specified under Regulation 26(i)(a) of 2009 regulations in respect

of the generating station as a special one time dispensation and allow the following NAPAF for different years of the tariff period 2009-14, for the purpose of recovery of full annual fixed charges:

Financial year	Net generation (MU)	NAPAF(%)
2009-10	8227	49.90
2010-11	11000	66.72
2011-12 to 2013-14	13188	80.00

Further, relaxation in the NAPAF as allowed above, is subject to the condition that the generating station shall be entitled to incentive corresponding to 50% of the availability in excess of 85% till such time the shortfall in availability from the 80% availability during the years 2009-10 and 2010-11 is made good. We would also like to make it clear that relaxation in NAPAF is a onetime dispensation and no further request for relaxation shall be entertained and consequences of any shortfall in performance shall be borne by the Petitioner."

Hence, the Commission has also considered the power purchase quantum of 11000 MU from RGPPL stations for FY 2010-11. As regards power purchase cost, the Commission has considered the fixed charges for FY 2010-11 as approved by CERC. Since the entire capacity is allocated to MSEDCL (as submitted by MSEDCL in its APR Petition), the entire fixed charge is payable by MSEDCL. The Commission has considered a variable charge of Rs. 2.87 per unit for purchase of power from RGPPL stations as approved by CERC.

The summary of power purchase expenses for FY 2010-11 from RGPPL is shown below:

Table: Power Purchase Details for RGPPL Approved for FY 2010-11

Source	MSEDCL		Approved	
	Quantum (MU)	PP Expenses (Rs. Crore)	Quantum(MU)	PP Expenses (Rs. Crore)
RGPPL	11000	4687.62	11000	5155.07

Power Purchase from Dodson I & II, Captive Power Plants and Non Conventional Sources

MSEDCL has forecasted energy availability of 21 MU from Dodson I HPS at a total cost of Rs. 4.94 Crore. The Commission has also considered energy availability of 21 MU from Dodson I HPS for FY 2010-11. However, for determining the power purchase cost, the Commission has relied on the Suo Motu Order for determination of generic tariff for renewable sources of power (Case No 20 of 2010, July 14 2010). The Commission in the said Order has determined the tariff for existing small hydro projects to be Rs. 2.99 per unit for FY 2010-11. Therefore, the Commission has determined the power purchase cost from Dodson I HPS for FY 2010 -11 at the rate of Rs. 2.99 per unit which amounts to the total power purchase cost of Rs. 6.38 Crore.

For Dodson II HPS, MSEDCL has considered a power purchase quantum of 51 MU with a total power purchase cost of Rs. 12.9 Crore. However, for determination of power purchase quantum and cost from Dodson II HPS, the Commission has considered the approved energy generation and the approved Annual Fixed Charges for FY 2010-11, in accordance with the Commission's Order for re-determination of tariff for Dodson II HPS in Case No. 105 of 2009, dated May 24, 2010. The approved energy generation for Dodson II HPS is 42.88 MU and approved Annual Fixed Charge is Rs. 15.21 Crore.

Regarding energy availability from CPPs and NCE sources, MSEDCL has projected power purchase of 392 MU at a cost of Rs 172 Crore, which the Commission has accepted. As regards NCE sources, MSEDCL in its Petition estimated power purchase quantum from NCE sources as 5308 MU at a cost of Rs 2336 Crore. However, in replies to datagaps MSEDCL revised the power purchase quantum from NCE sources as 4114 MU at a cost of Rs 2028 Crore, which has been accepted by the Commission.

Power Purchase from JSW IPP

MSEDCL has estimated power purchase quantum from JSW IPP as 1310 MU at a cost of Rs 354 Crore, which has been accepted by the Commission.

Power Purchase from Traders and Drawal from IBSM

MSEDCL, in its Petition, submitted that it has estimated power purchase of 470 MU from traders at an estimated expense of Rs. 260 Crore for FY 2010-11. MSEDCL submitted that in case of any shortfall in energy available from the above-mentioned sources, MSEDCL would source power from Traders or any other source available at market price prevailing at that point of time. Accordingly, MSEDCL requested the Commission to allow procurement of available power from the market to mitigate any shortfall pertaining to existing sources. Similarly, MSEDCL has estimated power procurement of 100 MU from Interim Balancing & Settlement Mechanism (IBSM) at an estimated cost of Rs. 5 per unit.

Considering the total energy input requirement of MSEDCL for FY 2010-11 and projected energy availability from various sources, in this Order, the Commission has not considered any power purchase from traders during FY 2010-11. However, in case of increase in energy requirement and/or shortfall in energy availability from other sources, MSEDCL should consider purchase of power from traders to meet the energy requirement. If required, MSEDCL may approach the Commission separately for prior approval for purchase of power from traders in accordance with Regulation 25 of MERC (Terms and Conditions of Tariff) Regulations, 2005.

The power purchase quantum projected by the Commission in this Order is not a ceiling quantum, but an estimated quantum based on the present sales projection, and the allowed level of distribution losses. Obviously, if the actual sales increase beyond the levels considered in this Order, then the power purchase quantum would also increase correspondingly. Further, the MERC Tariff Regulations also provide for short-term power purchase and the procedure to be observed by the distribution licensee in the event of unforeseen wide variation in the sales forecast. However, any additional power purchase on account of its failure to reduce distribution losses will be to MSEDCL's account, and the treatment of the same will be governed by the provisions of the MERC Tariff Regulations. MSEDCL should not increase the hours of load shedding for any category/region, citing the power purchase quantum approved in the Commission's Order as a ceiling figure.

Similarly, the Commission has not considered any increment/decrement from IBSM for FY 2010-11, as it is very difficult to predict the same. However, the actual increment/decrement from IBSM for FY 2010-11 and the corresponding cost impact will be considered by the Commission while truing up the ARR for FY 2010-11.

External Transmission Charges Payable to PGCIL

MSEDCL has estimated the transmission charges payable to PGCIL at Rs. 422 Crore for FY 2010-11, which has been accepted by the Commission. MSEDCL has also projected the charges receivable by MSEDCL for injection of reactive energy as Rs. 2.20 Crore, which has been accepted by the Commission.

Intra-State Transmission Charges

MSEDCL projected Transmission Charges of Rs. 1494 crore for FY 2009-10, as approved by the Commission for FY 2009-10. However, in replies to data gaps regarding actual power purchase during FY 2009-10, MSEDCL submitted Rs 1491.50 Crore as actual Intra-State Transmission Charges, which has been accepted by the Commission. MSEDCL requested the Commission to consider the transmission tariff payable to transmission licensees as approved by the Commission in the APR for FY 2009-10, for determination of MSEDCL's revenue requirement for FY 2010-11.

For FY 2010-11, the Commission vide its Order dated September 10, 2010 in Case No. 120 of 2009, in the matter of determination of Transmission Tariff for the Intra-State Transmission System, has approved the revised Transmission Charges for FY 2010-11 with effect from September 1, 2010. Accordingly, the Commission has considered the monthly transmission charges payable by MSEDCL for FY 2010-11, as approved in the above-said Order for 7 months, and has considered the monthly transmission charges for 5 months as approved in the Order in Case No. 155 of 2008. Accordingly, the total transmission charges payable by MSEDCL for FY 2010-11 as approved by the Commission works out to Rs. 1868 Crore.

SLDC Charges

As regards the MSLDC charges for FY 2010-11, the Commission in its Order dated August 6, 2010 in the matter of Approval of MSLDC Budget for FY 2010-11 (Case No. 94 of 2009) has determined the mechanism for the recovery of MSLDC Fees and Charges for FY 2010-11. The Commission has considered MSEDCL's share of the approved MSLDC Fee for FY 2010-11 based on the above-said Order, which works out to Rs. 10.64 Crore.

The total approved power purchase expenses for FY 2010-11, excluding transmission charges and SLDC Fees and Charges are as tabulated below:

Particulars	MSEDCL		Approved	
	Energy sent out	**Total Cost**	**Energy Sent Out**	**Total Cost**
	MU	**Rs Crore**	**MU**	**Rs Crore**
MSPGCL	**47995**	**12035**	**50490**	**11359**
DODSON I	21	5	21	6
DODSON II	51	13	43	15
RGPPL	11000	4688	11000	5155
NCE	5308	2336	4114	2028
CPP	392	172	392	172
IPP - JSW	1310	354	1310	354
IBSM	100	50	0	0
Other Sources within the State	**18182**	**7617**	**16880**	**7731**
KSTPS	5466	705	5096	587
VSTP I	3616	704	3395	488
VSTP II	2829	556	2652	501
VSTP III	2463	520	2211	520
KAWAS GAS	1615	569	1345	321
GANDHAR	1576	615	1314	573
FSTPP	0	0	129	35
KhTPS-I	0	0	61	19
KhTPS-II	511	125	511	149
TSTPS	0	0	84	13
Sipat TPS	2616	565	2242	593

Particulars	MSEDCL		Approved	
	Energy sent out	**Total Cost**	**Energy Sent Out**	**Total Cost**
	MU	**Rs Crore**	**MU**	**Rs Crore**
NTPC	**20692**	**4358**	**19040**	**3799**
KAPP	346	75	368	80
TAPP 1&2	1206	115	1206	115
TAPP 3&4	1948	533	1934	529
NPCIL	**3500**	**723**	**3507**	**725**
CGS Stations	**24192**	**5082**	**22548**	**4523**
U.I. CHARGES	**100**	**30**	**0**	**0**
SSP	540	111	635	130
PENCH	240	49	240	49
Trading Company	470	260	0	0
Zero Load Shedding*	1480	0	0	0
MSEDCL PP through IEX	0	0	0	0
Other Sources from outside the State	**2730**	**420**	**875**	**179**
Total PP from Outside State	**27022**	**5532**	**23423**	**4703**
Power Grid	0	422	0	422
Reactive Charges	0	-2	0	-2
WRPC	0	0	0	0
Total Power Purchase	**93199**	**25605**	**90793**	**24213**

*It may be noted that Power Purchase quantum projected by MSEDCL includes power purchase for ZLS schemes, which is outside the purview of this tariff determination process and hence, has not been considered by the Commission.

4.6 O&M Expenses for FY 2009-10 and FY 2010-11

The O&M expenditure comprises of employee expenditure, A&G expenditure and R&M expenditure, as discussed below.

4.6.1 Employee Expenses

MSEDCL submitted that for FY 2009-10, it has projected revised employee expenses of Rs 2678.38 Crore as compared to the expenses of Rs. 2512 Crore approved in the previous APR Order. For FY 2010-11, MSEDCL projected employee expenses of Rs. 2837.19 Crore.

MSEDCL submitted that the net employee expenditure for FY 2009-10 has been estimated at Rs. 2678.38 Crore after adjusting for capitalization of Rs. 234.40 Crore, which amounts to an increase of around 6.62% over the approved expense of Rs. 2512 Crore for FY 2009-10. For FY 2010-11, the employee expenses have been projected to increase by 6% over the revised estimates of FY 2009-10. For FY 2009-10 and FY 2010-11, MSEDCL has considered the amortisation of leave encashment equivalent to Rs. 88 Crore annually, as approved by the Commission in the APR Order. MSEDCL submitted that the capitalisation of employee expenses has been considered at the same rate of 8% for FY 2009-10 and FY 2010-11, as considered for FY 2008-09.

MSEDCL submitted the following reasons for the projected increase in employee expenses for FY 2009-10 and FY 2010-11 as compared to the expenses approved by the Commission:

- Provision for wage revision of MSEDCL employees due from April 1, 2008 of Rs. 364 crore and Rs. 422 crore for FY 2008-09 and FY 2009-10 respectively. MSEDCL has estimated an impact of 20% on account of wage revision on Gross employee expense of FY 2007-08 as base. MSEDCL added that the projection for FY 2009-10 has been done considering normal escalation over the actual employee expenses for FY 2008-09. However, actual impact of FY 2008-09 has increased from Rs. 364 crore to Rs. 417 crore. In a similar manner, impact in FY 2009-10 is also more than the provision, which is implicitly embedded in the revised basic salary of employee.
- Further, MSEDCL has initiated a Voluntary Retirement Scheme (VRS) for its line staff and hence, a provision of Rs. 19 Crore has been considered for FY 2009-10.

MSEDCL also submitted the following reasons for the increase in the various sub-heads of employee expenditure:

- Basic Salary: For FY 2009-10, MSEDCL has estimated an employee expense of Rs. 1280.64 Crore after considering an increase of 4% over the actual expenditure of Rs. 1231.38 Crore for FY 2008-09, and considering an impact on expected inductions/retirements during the second half of FY 2009-10.

- Dearness Allowance (DA): Dearness Allowance has been computed as a percentage of the basic salary and is increased twice a year. Considering present trend of inflation, weighted average increase of 6% in DA has been considered during the second half of the year. DA rate has been considered as 28% of basic salary based on the weighted average rate of DA applicable during each month.
- Overtime Payment and other Allowances: Overtime is payable only for the line field staff, and has been projected to increase at the rate of 11% p.a. over the previous year’s levels.
- Ex–Gratia: Ex-gratia paid for FY 2008-09 is Rs. 5000 per employee against Rs. 7000 per employee during FY 2007-08. Projected figure for Ex–Gratia for FY 2009-10 and FY 2010-11 is Rs. 30.96 Crore.
- Pension: MSEDCL has projected Rs. 0.55 Crore and Rs. 0.72 Crore as provision for pension for FY 2009-10 and FY 2010-11, respectively, after considering an increase of 30% over payments made during FY 2008-09.
- Gratuity: For projecting gratuity payments for FY 2009-10 and FY 2010-11, an annual increase of 5% over the actuals of FY 2008-09 has been considered, which works out to Rs. 273.46 Crore and Rs. 287.14 Crore, respectively.
- Leave Encashment: Only incremental provisioning has to be done in FY 2009-10 and in further years, since the first-time provisioning has been done in FY 2006-07. Provisioning of Rs. 448.63 Crore has been considered towards provision of earned leave encashment for FY 2009-10, and an increase of 4% has been considered for FY 2010-11.
- Staff Welfare Expenses: Based on the actual expenditure incurred in FY 2008-09, it is estimated that the total expenditure during FY 2009-10 shall be Rs. 9.85 Crore. For projecting the staff welfare expenses for FY 2010-11, the same percentage increase, i.e., 4% has been considered. This includes expense on account of ‘Group Personal Accident Policy’ to cover all employees of MSEDCL in case of injuries/death occurred while in the service of the Company.

The Commission asked MSEDCL to submit the rate of DA as a percentage of basic salary prevalent for different periods in FY 2008-09 and FY 2009-10 (till date) as well as projected for the balance period of FY 2009-10 and FY 2010-11. In reply, MSEDCL submitted the prevalent rates of DA as under:

Period	**DA as a percentage of Basic Salary**
Jan to March 2008	97% on pre-revised basic
April to June 2008	12% on revised basic
July to Dec. 2008	16% on revised basic
Jan to June 2009	22 % on revised basic
July to Dec 2009	27% on revised basic

MSEDCL added that for projection purposes, an average rate of DA increase, i.e., 6% during six months on 28% DA for FY 2010-11 has been considered.

In response to the query raised by the Commission, MSEDCL submitted the details of actual head-wise expenses in H1 and H2 over the last three years, for employee expenses.

The Commission asked MSEDCL to submit the detailed calculation of savings projected to accrue and the Cost Benefit Analysis of the Voluntary Retirement Scheme for its line staff. In reply, MSEDCL submitted that vide its Adm. Circular No.163 dated August 4, 2008, it has launched Early Retirement Scheme for the line staff who have crossed the age of 45 years and are left with minimum five years of service and found physically unfit to carry out their normal duties. Such employees have been considered under Early Retirement with any of the following two options:

(A) The member of the Line staff may opt for compensation for remaining service

OR

(B) Employment as 'Veej Sevak' to his son in lieu of early retirement under the said scheme.

MSEDCL submitted that 653 employees opted for compensation and 963 employees opted for appointment as Veej Sevak to their sons. MSEDCL incurred an expense of Rs.

67.45 Crore under this scheme. MSEDCL submitted the projected savings in employee expenditure on account of VRS scheme as under:

(A) Projected savings when line staff is opting for Veej Sevak option:

Total amount of savings during the period of 10 years: Rs.100 Crore (approx.)

Further, by employing 'Veej Sevak', MSEDCL will get technically qualified young blood, which will be more energetic and efficient at low cost.

(B) Projected savings when employees have opted for ex-gratia payment, i.e., compensation:

Under this scheme, 653 employees have submitted their options. The posts vacated by these employees will not be filled in by way of Direct Recruitment. The Commission has hence, taken into account the savings due to VRS scheme as well as Veej Sevak scheme, based on the submissions of annual savings estimated by MSEDCL, and considering the number of employees who have opted for the scheme and average salary expenditure as submitted by MSEDCL

The Commission enquired of MSEDCL regarding incremental provisioning towards earned leave encashment to the extent of Rs. 448.6 Crore in FY 2009-10, with 4% increase for FY 2010-11 along with justification in view of the fact that the one-time provisioning of Rs. 440 Crore in FY 2006-07 has already been considered in tariff (through amortisation over a period of 5 years). The Commission directed MESDCL to submit the actual provisioning in this regard for FY 2008-09. In reply, MSEDCL submitted that actual expenditure on leave encashment during FY 2008-09 is Rs. 431.37 Crore. Provision for leave encashment for FY 2010-11 has been projected on the basis of actual expenditure on leave encashment incurred during FY 2008-09. MSEDCL added that the expenditure on provisioning for leave encashment has been increased due to wage revision (effective from 1st April 2008). Further, every year there is addition to earned leave and half pay leave balance and encashment.

The Commission, in its earlier Order, has allowed MSEDCL to shift from earlier cash based system to provisioning for leave encashment based on Actuarial Valuation Report. Based on this Report, the Commission has allowed Rs. 440 Crore to be recovered in five equal instalments of Rs 88 Crore. MSEDCL at the time of approval indicated that this is a one-time expense. However, now MSEDCL is seeking to again shift from provisioning basis to cash basis and incremental amount sought is more than the provisioning amount of Rs 440 Crore. The Commission directed MSEDCL to submit detailed computation, justification and Actuarial Report for FY 2009-10 and FY 2010-11. MSEDCL, in its reply, submitted that Leave Encashment liability is provided every year for the liability accrued up to the end of that Financial Year, for leave actually earned and credited as a leave balance to each employee. Amount shown as provision for leave encashment at the end of Financial Year is certified. The differential amount, i.e., difference in the balance lying in the leave encashment provision account and the amount certified is required to be provided in the accounts as per AS 15. MSEDCL added that the Actuarial Report for FY 2009-10 and FY 2010-11 will be furnished after closure of the financial year.

For FY 2009-10, under each sub-head of employee expenditure, the Commission has considered an increase of around 6.35% on account of inflation over the revised level of employee expenses as approved for FY 2008-09 under the truing up exercise in this Order, based on the increase in Consumer Price Index (CPI), except for leave encashment. The Commission has considered the point to point inflation over CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 5 years, i.e., from the year 2005 to 2009 (numbers as on March of the year), to smoothen the inflation curve. The Commission will undertake the final truing up of employee expenses for FY 2009-10 based on actual employee expenses for the entire year and prudence check.

As regards leave encashment, the Commission has accepted the submission of MSEDCL for additional provisioning of Rs 431.37 Crore in FY 2008-09. However, MSEDCL has sought Rs 449 Crore and Rs 467 Crore under this head for FY 2009-10 and FY 2010-11, respectively, since MSEDCL has considered a 4% growth rate in the same. However, by MSEDCL's own admission, only incremental provisioning needs to be done every year, to ensure that the balance provisioning in the fund matches the funds requirement as per the actuarial valuation. Further, the provisioning for leave encashment in FY 2008-09 has already accounted for the impact of pay revision in FY 2008-09. Hence, only incremental provisioning amount needs to be claimed by MSEDCL. However, no such documentary evidence, basis or rationale has been submitted to the Commission by MSEDCL. Hence, on provisional basis, the Commission has considered 50% of the amount projected by MSEDCL for FY 2009-10 and FY 2010-11 under this head.

For FY 2010-11, for each sub-head of employee expenditure, the Commission has considered an increase of around 8.49% p.a. on account of inflation over the revised level of employee expenses as approved for FY 2009-10 under the provisional truing up exercise in this Order, based on the increase in Consumer Price Index (CPI), except provision for leave encashment, as discussed above. For FY 2010-11, the Commission has considered the point to point inflation over CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 5 years starting from FY 2005-06 to FY 2009-10 (numbers as on March of the year), to smoothen the inflation curve.

Further, as regards capitalisation of employee expense for FY 2009-10 and FY 2010-11, the Commission has considered the capitalisation at the same percentage as submitted by MSEDCL in its Petition.

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

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

Particulars	**FY 2009-10**			**FY 2010-11**	
	APR Order	**Revised Estimate**	**Approved**	**Projected**	**Approved**
Gross employee expenses	**2126**	**2825**	**2524**	**2998**	**2730**
Less: Capitalisation	125	234	209	249	227
Net employee expenses (net of capitalisation)	**2001**	**2590**	**2314**	**2749**	**2503**
Deferred expense for Earned Leave Encashment as per MERC order dated	**88**	**88**	**88**	**88**	**88**

Particulars	**FY 2009-10**			**FY 2010-11**	
	APR Order	**Revised Estimate**	**Approved**	**Projected**	**Approved**
20/06/08 on APR for FY 2007-08					
Impact of Pay revision due on 1st April 2008	**422**	**-**	**-**	**-**	**-**
Net Employee Expenses	**2512**	**2678**	**2402**	**2837**	**2591**

It may be noted that the approved employee expenses for FY 2009-10 are lower than the employee expenses allowed for FY 2008-09, on account of consideration of only 50% of the incremental provisioning for leave encashment, as claimed by MSEDCL.

4.6.2 A&G Expenses

MSEDCL submitted that for FY 2009-10, the revised A&G expenses have been estimated as Rs. 363.08 Crore as compared to the approved expenses of Rs. 213 Crore. For FY 2010-11, MSEDCL has estimated Rs. 416.62 Crore towards A&G expenses. MSEDCL submitted that based on the present trend of inflation, it has considered an increase of 10% over the previous year’s expenses for most of the expense heads under A&G, for estimation of A&G expenses for FY 2009-10 and FY 2010-11.

MSEDCL submitted that the increase in the projected expense from Rs. 302 Crore in previous APR Petition to Rs. 363 Crore now, is not only due to inflation and increase in volume of transactions, but also due to the following:

- Two new zones, i.e., Nanded and Jalgaon, and three new circles, i.e., Nandurbar, Washim and Baramati, have become fully operational during FY 2009-10.
- New divisions and sub-divisions have also been created during FY 2009-10.
- Frequent drives are being taken to detect theft of power.

However, in case of conveyance and travel, computer stationery expenses, advertisement expenses, vehicle running, and vehicle hire expenses, an increase of 25 % over previous year's expenses has been considered, because of the increase in number of consumers, special recovery drive, theft detection drive, public awareness campaign, etc. Similarly, in case of rent, rates and taxes, a 10% increase over previous year's expenses has been considered. MSEDCL submitted the following reasons for the increase in the sub-heads of A&G expenditure:

- Conveyance and Travel expenses: In order to reduce distribution loss, there has been an increase in special recovery drive, theft detection drive, and public awareness campaign, etc. Also, the price of petrol and diesel has gone up considerably. Based on actual expenses incurred during FY 2008-09, MSEDCL has estimated that a total expenditure of Rs. 24.94 Crore will be incurred in FY 2009-10, amounting to an increase of Rs. 4.99 Crore. The same has been projected to increase by 25% in FY 2010-11.
- Advertisement Expenses: A substantial increase has been projected over the previous year's expenses under this head, on account of the higher capital expenditure projected to be incurred, as well as the need to create public awareness to avoid theft of energy, promotion of energy conservation, etc.
- Telephone and Postage: Due to creation of new Circles, Divisions and Sub-division offices, the expenditure on telephone charges has increased considerably, and hence, an increase of 10% has been considered over actual expenses in FY 2008-09 for projecting the expenses for FY 2009-10 and FY 2010-11.
- Security arrangement: In order to protect MSEDCL's assets and provide adequate security to employees, additional security measures are required to be taken, leading to additional expenditure. Hence, MSEDCL has estimated an annual increase of 10% under this head, i.e., an expenditure of Rs. 27.80 Crore in FY 2009-10 and an increase of 10% for FY 2010-11.
- Computer Stationery: The expenditure on Computer Stationery has been estimated to increase by approximately 25% in FY 2009-10 as compared to FY 2008-09, on account of shifting to photo billing, providing bills in Marathi language, as well as increase in the cost of stationery.

For FY 2009-10, the Commission has considered an increase of around 5.48% on account of inflation over the gross A&G expenses for FY 2008-09 as approved in this Order, based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) and CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 5 years, i.e., FY 2004-05 to FY 2008-09 (up to March 2009), to smoothen the inflation curve. The Commission has considered a weight of 60% to WPI and 40% to CPI, based on the expected relationship with the cost drivers. The Commission will undertake the final truing up of A&G expenses for FY 2009-10 based on actual A&G expenses for the entire year and prudence check. Further, as regards capitalisation, the Commission has considered the same percentage as submitted MSEDCL in its Petition for FY 2009-10.

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

Accordingly, the approved A&G expenses for FY 2009-10 and FY 2010-11 are summarised in the following Table:

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

Particulars	**FY 2009-10**			**FY 2010-11**	
	APR Order	**Revised Estimate**	**Approved**	**Projected**	**Approved**
Gross A&G expenses	**266**	**400**	**269**	**459**	**288**
Less: Capitalisation	53	37	25	42	26

Particulars	**FY 2009-10**			**FY 2010-11**	
	APR Order	**Revised Estimate**	**Approved**	**Projected**	**Approved**
Net A&G expenses	**213**	**363**	**245**	**417**	**262**

4.6.3 R&M Expenses

MSEDCL submitted that the R&M expenses have been estimated as Rs. 658.66 Crore for FY 2009-10, as compared to the approved expense of Rs. 482 Crore for FY 2009-10. For FY 2010-11 MSECL has estimated R&M expenses of Rs 724.53 Crore . MSEDCL added that while estimating R&M expenses for FY 2009-10 and FY 2010-11, an annual increase of 10% has been considered over actual audited R&M expenses of FY 2008-09.

In its Petition, MSEDCL submitted that the projected R&M expenditure for FY 2009-10 includes works like part replacement of HT and LT Cables, Distribution boxes, LT and HT poles, single phase/three phase/CT operated Meters, DTC Maintenance, re-earthing, providing guarding, crimping of jumpers at cut points, labour charges on all the above, etc. MSEDCL requested the Commission to take into consideration the aspect of deteriorated infrastructure, its service life and its redundancy factor while approving the R&M expenditure for FY 2009-10. MSEDCL submitted that since most of the distribution network is overhead, it is therefore, susceptible to the onslaught of environment and other related factors. The spare parts are also not available due to change in technology and ceasing of production of such old equipments. Under this circumstance, reduction in life cycle and frequent maintenance is inevitable and the expenditure requirement is high.

The Commission directed MSEDCL to submit detailed plan regarding R&M expenses of Rs. 725 Crore in FY 2010-11. In response, MSEDCL submitted that it has projected an expenditure of Rs. 725 Crore on R&M in FY 2010-11, based on the actual expenditure incurred during FY 2008-09. MSEDCL considered an annual escalation rate of 10% over actual expense of FY 2008-09 for projecting R&M expenses for FY 2009-10 and FY 2010-11.

For FY 2009-10, for each sub-head of R&M expenditure, the Commission has considered an increase of around 4.91% on account of inflation over the revised level of R&M expenses as approved for FY 2008-09 in this Order, based on the increase in Wholesale Price Index (WPI). The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) for a period of 5 years, i.e., FY 2004-05 to FY 2008-09 (up to March 2009), to smoothen the inflation curve. The Commission will undertake the final truing up of R&M expenses for FY 2009-10 based on actual R&M expenses for the entire year subject to prudence check.

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

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

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

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

	APR Order	Revised Estimate	Approved After provisional truing up	Projected	Approved
Net R&M expenses	482	659	481	725	510

4.7 Capital expenditure and capitalisation

MSEDCL submitted that the basic objective of incurring the capital expenditure was to upgrade the ageing and weak distribution network to desirable standards so as to provide better network reliability and sustainable performance. The plan also envisaged reinforcement of the system to provide quality, security and availability of power supply to the consumers, to undertake system development to meet the load growth, achieving the targeted reduction in system losses, undertake automation and other improvement works to enhance customer service and fulfil social obligations such as electrification of un-served areas. MSEDCL, in its Petition, proposed capital expenditure under the following broad heads:

- **APDRP Schemes** – These include erection of new 33 kV substations, 33kV lines, New Distribution Transformer Centres, Capacitor banks, etc.
- **Infrastructure Works Plan:** These include carrying out modification/ improvement in the distribution network for providing reliable, enhanced quality of supply, improving the Standards of Performance and reduction in distribution loss.
- Gaothan Feeder Separation Schemes: These include segregation of LT-IV Agriculture category load and other category load on separate feeders.
- **Automated Meter Reading**
- **RGGVY** - Electrification of rural households including 100 % Below Poverty Line (BPL) households and its associated infrastructure works
- **Agriculture Metering:** These include the metering works of un-metered agriculture connect**ions in order to reduce** the losses.

Other than the above capital investment plan, MSEDCL proposed numerous other schemes for reactive power management, load growth, DTC metering, etc. MSEDCL, in its Petition, proposed a total capitalisation of Rs. 2900.61 Crore in FY 2009-10 and Rs. 4586.19 Crore in FY 2010-11, which included inter-alia, Rural Electrification Distribution schemes of Rs. 651 Crore in FY 2009-10 and Rs. 622 Crore in FY 2010-11, other distribution schemes of Rs. 61 Crore in FY 2009-10 and Rs. 70 Crore in FY 2010-11, Infrastructure works of Rs. 854 Crore in FY 2009-10 and Rs. 1470 Crore in FY 2010-11, Gaothan Feeder Separation Schemes (GFSS) Phase I, II & III of Rs. 692 Crore in FY 2009-10 and Rs. 808 Crore in FY 2010-11, APDRP schemes of Rs. 224.02 Crore in FY 2009-10 and R-APDRP schemes of Rs. 1223 Crore in FY 2010-11, DTC metering, MIS schemes and schemes under DRUM of Rs. 63.11 Crore in FY 2009-10 and Rs. 89 Crore in FY 2010-11, Backlog schemes of Rs. 75.32 Crore in FY 2009-10 and Rs. 80 Crore in FY 2010-11.

The details of total capital expenditure and capitalisation proposed by MSEDCL for FY 2009-10 and FY 2010-11 are shown in the Table below:

Table: Capital Expenditure and Capitalisation proposed by MSEDCL (Rs Crore)

	FY 2009-10				FY 2010-11			
Project Title	Opening CWIP	Investment during the year	Capitalisation	Closing CWIP	Opening CWIP	Investment during the year	Capitalisation	Closing CWIP
Infrastructure Plan works	275.02	1067.71	854.17	488.56	488.56	1838.00	1470.40	856.16
Gaothan Feeder Separation Scheme - Phase I	266.96	315.00	252.00	329.96	329.96	0.00	0.00	329.96
Gaothan Feeder Separation Scheme - Phase II	17.15	500.00	400.00	117.15	117.15	838.54	670.83	284.86
Gaothan Feeder Separation Scheme - Phase III	1.36	50.00	40.00	11.36	11.36	172.05	137.64	45.77
Fixed Capacitor Scheme	0.31	0.00	0.00	0.31	0.31	17.92	14.34	3.89
AMR	1.00	25.00	20.00	6.00	6.00	0.00	0.00	6.00
FMS	0.12	0.00	0.00	0.12	0.12	0.00	0.00	0.12
APDRP								
Phase-I	527.57	0.00	0.00	527.57	527.57	0.00	0.00	527.57
Phase-II	29.75	0.00	0.00	29.75	29.75	0.00	0.00	29.75
R-APDRP A	0.00	136.73	109.38	27.35	27.35	241.56	193.25	75.66
R-APDRP B	0.00	143.30	114.64	28.66	28.66	1286.70	1029.36	286.00
Internal Reform								
DTC Metering								
Phase-II (Part I & II)	6.03	0.00	0.00	6.03	6.03		0.00	6.03
Phase-III	0.06	25.00	20.00	5.06	5.06	64.75	51.80	18.01
MIS	2.15	29.76	23.81	8.10	8.10	35.00	28.00	15.10
DRUM	38.45	24.13	19.30	43.27	43.27	10.00	8.00	45.27
Load Management	8.16	0.00	0.00	8.16	8.16	0.00	0.00	8.16
Distribution Scheme								
P.F.C.Urban Distribution	37.57	0.00	0.00	37.57	37.57	0.00	0.00	37.57
MIDC Interest free Loan Scheme	24.78	0.00	0.00	24.78	24.78	0.00	0.00	24.78
Evacuation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Evacuation Wind Generation (Captive Power)	0.26	16.24	12.99	3.51	3.51	17.00	13.60	6.91
Agriculture Metering	6.54	60.00	48.00	18.54	18.54	70.00	56.00	32.54
RGGVY	41.58	325.07	260.06	106.59	106.59	264.13	211.30	159.42
R E Dist								
I- R E / N D								
DPDC / Non-Tribal	81.04	134.32	107.46	107.90	107.90	125.29	100.23	132.96
DPDC / SCP	28.24	36.28	29.02	35.49	35.49	38.10	30.48	43.11
DPDC / TSP + OTSP	36.54	64.07	51.26	49.36	49.36	58.20	46.56	61.00
Rural Electrification (Grant)	4.79	10.00	8.00	6.79	6.79	10.50	8.40	8.89
SPA:PE	243.53	260.00	208.00	295.53	295.53	260.00	208.00	347.53
P:SI	86.43	85.00	68.00	103.43	103.43	85.00	68.00	120.43
P:IE	35.56	200.00	160.00	75.56	75.56	200.00	160.00	115.56
III-JBIC	0.00	0.00	0.00	0.00	0.00		0.00	0.00
JBIC	5.29	24.00	19.20	10.09	10.09	0.00	0.00	10.09
New Consumers	10.01	0.00	0.00	10.01	10.01	0.00	0.00	10.01
Back log	127.56	94.15	75.32	146.39	146.39	100.00	80.00	166.39
Total	**1943.78**	**3625.76**	**2900.61**	**2668.93**	**2668.93**	**5732.74**	**4586.19**	**3815.48**

In the context of Infrastructure works, MSEDCL submitted that it has submitted 119 DPRs as a part of infrastructure works amounting to a capital outlay of Rs. 8918.16 Crore, which has received in-principle approval from the Commission.

The Commission observed that one of the reasons submitted by MSEDCL for the large capital expenditure is for MSEDCL to provide reliable, quality supply and improve the Standards of Performance. Accordingly, the Commission asked MSEDCL to submit reliability indices for FY 2008-09, FY 2009-10 and FY 2010-11, in reply to which, MSEDCL submitted the circle wise reliability indices for FY 2008-09 and FY 2009-10. As regards such indices for FY 2010-11, MSEDCL submitted that it is on the verge of establishing the reliability indices for all circles and it will not be possible for MSEDCL to project the reliability indices for FY 2010-11 in the absence of adequate data.

The capitalisation approved by the Commission in its previous Orders and the revised estimates submitted by MSEDCL in the APR Petition are shown in the Table below:

Table: Capital Expenditure and Capitalisation (Rs Crore)

Particulars	FY 2009-10		FY 2010-11
	APR Order	Revised Estimate by MSEDCL	Estimate by MSEDCL
Capitalisation	1297.73	2900.61	4586.19

The capitalisation estimated by MSEDCL for FY 2009-10 is more than double the capitalisation approved by the Commission in its previous APR Order. The Commission enquired regarding the actual (un-audited) scheme-wise capital expenditure and capitalisation for FY 2009-10, in reply to which MSEDCL submitted the actual scheme wise capitalisation for FY 2009-10 as Rs 1690 Crore. The Commission observed that, out of the actual capitalisation of Rs 1690 Crore submitted by MSEDCL, capitalisation of only Rs 769.10 Crore pertains to the capitalisation of DPR schemes for which in-principle approval has been granted by the Commission. Further, it is also observed that MSEDCL has not submitted any details on the benefits accrued through such schemes against that projected in the DPR of such schemes, as was directed by the Commission in the previous APR Order. In view of the above, the Commission approves a capitalisation of 50% of the capitalisation against DPR schemes for which, in-principle approval has been granted by the Commission, which amounts to capitalisation of Rs 384.55 Crore. The Commission shall consider the disallowed capitalisation against such DPR schemes, once the benefits of such schemes are established by MSEDCL. As regards capitalisation of Non DPR schemes, the Commission had set a general rule in its previous APR Order that the capitalisation against Non DPR schemes shall have to be restricted to 20% of the capitalisation of DPR schemes. Accordingly, for the purpose of provisional truing up for FY 2009-10, the Commission has considered Rs 76.91 Crore towards the capitalisation of Non-DPR schemes. Thus, a total capitalisation of Rs 461.46, including capitalisation of DPR and Non DPR schemes has been approved by the Commission for FY 2009-10.

For approving capitalisation of FY 2010-11, the Commission has considered only capitalisation of such DPR schemes for which in-principle approval has been granted by the Commission. However, adopting a similar approach as explained in the above paragraph while approving the capitalisation for FY 2009-10, the Commission has considered 50% of proposed capitalisation against such schemes, except in case of DPR schemes of infrastructure plan works and Gaothan Feeder Separation Scheme - Phase II. As regards these schemes, the Commission observed that the capitalisation proposed against these two schemes forms nearly 47% of the total capitalisation proposed by MSEDCL for FY 2010-11. However, the same is definitely on a higher side and in view of the trend of actual capitalisation in past years by MSEDCL, it is highly unlikely that such a capitalisation level will be achieved. Hence, for FY 2010-11, the Commission has considered a capitalisation of Rs 232.72 Crore and Rs 161.54 Crore against these two schemes, which are the actual capitalisation level of the respective schemes for FY 2009-10 as submitted by MSEDCL. Based on the above approach adopted for FY 2010-11, the total capitalisation considered for FY 2010-11 amounts to Rs. 876.51 Crore, which includes capitalisation of Rs 730.42 Crore towards DPR schemes and Rs 146.08 Crore towards Non-DPR schemes.

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

Table: Approved Capitalisation (Rs Crore)

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by MSEDCL	Approved	Estimate by MSEDCL	Approved
Capitalisation	1297.73	2900.61	461.46	4586.19	876.51

4.8 Depreciation

The Commission had considered depreciation to the extent of Rs 436.13 Crore for FY 2009-10 in the APR Order dated August 17, 2009, which amounts to 3.71% of Opening level of Gross Fixed Assets (GFA) of MSEDCL for FY 2009-10. The opening GFA was stated at Rs 11760.85 Crore for FY 2009-10. The depreciation rates were considered as prescribed under MERC Tariff Regulations.

MSEDCL, in its APR Petition, submitted the estimate of depreciation for FY 2009-10 and FY 2010-11 as Rs 551.31 Crore and Rs 692.45 Crore, respectively, at an overall depreciation rate of 4.10% and 4.24% corresponding to opening GFA of 13438.68 Crore and Rs 16339.29 Crore, respectively, as shown in the Table below:

Table: Depreciation Projected by MSEDCL (Rs Crore)

Particulars	FY 2009-10		FY 2010-11
	APR Order	Revised Estimate by MSEDCL	Revised Estimate by MSEDCL
Depreciation	436.13	551.31	692.45
Opening GFA	11760.85	13438.68	16339.29
Depn as % of Op. GFA	**3.71%**	**4.10%**	**4.24%**

In response to the Commission's query, MSEDCL submitted that no replacement or retirement of assets has been undertaken in FY 2009-10 and further confirmed that the

GFA of the assets that have been replaced in the past has been deducted from Opening GFA.

The Commission enquired of MSEDCL about the current accounting practice/treatment presently being followed by MSEDCL for replacement of assets. In response, MSEDCL submitted the following practice being followed by MSEDCL in respect of asset replacement.

> *"Replacement is substitution of one fixed asset by another, particularly of an old asset by new asset or of an old part by a new part. The expenditure on minor replacements is charged to revenue accounts as Repair and Maintenance expenditure, however, the major replacement expenditure is capitalised. Further, the cost and accumulated depreciation of the old replaced asset shall be withdrawn when the expenditure on the new replacing asset is capitalised. A broad criterion of distinguishing minor and major expenditure is that, replacement of any asset or part of the asset for which a separate fixed asset record is required, is considered major replacement."*

Further MSEDCL submitted that, currently it does not have a system to identify the asset-wise equity, consumer contribution and outstanding loan. Also, when the asset is replaced, the loan taken for the asset may not be outstanding. Hence, the equity, consumer contribution and outstanding loan corresponding to the replaced assets have not been deducted from equity, consumer contribution and outstanding loan for respective years.

In view of revised value of capitalisation as approved under previous paragraphs, the depreciation expenditure for FY 2009-10 and FY 2010-11 has been recomputed and the approved expense towards it is summarised in the following Table:

Table: Depreciation approved (Rs Crore)

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

	APR Order	Revised Estimate by MSEDCL	Approved	Revised Estimate by MSEDCL	Approved
Depreciation	436.13	551.31	424.85	692.45	450.07
Opening GFA	11760.85	13438.68	11256.27	16339.29	11717.73
Depreciation as % of Op. GFA	**3.71%**	**4.10%**	**3.77%**	**4.24%**	**3.84%**

The Commission will however, undertake the truing up of Depreciation based on actual capitalisation in the year, subject to prudence check.

4.9 Interest Expenses

The Commission had permitted net interest expense to the extent of Rs 261.06 Crore for FY 2009-10, in the APR Order dated August 17, 2009. Loan addition of Rs 459.64 Crore was considered in the APR Order for FY 2008-09.

MSEDCL, in its APR Petition, submitted the revised estimate of net interest expense of Rs 584.02 Crore and an estimate of Rs 1014.65 Crore, for FY 2009-10 and FY 2010-11 respectively, as summarised in the following Table:

Table: Interest Expense (Rs Crore)

Particulars	FY 2009-10		2010-11
	APR Order	Revised Estimate by MSEDCL	Estimate by MSEDCL
Op. balance of loan	2680.44	4024.67	5967.31
Loan Addition	459.64	2642.38	4637.96
Loan Repayment	(463.70)	(699.74)	(688.16)

Particulars	**FY 2009-10**		**2010-11**
	APR Order	**Revised Estimate by MSEDCL**	**Estimate by MSEDCL**
Cl. Balance of loan	2676.38	5967.31	9917.10
Gross Interest Expense	282.84	620.28	1071.98
Less: IDC (existing loan)	(21.78)	(36.26)	(57.33)
Less: IDC (new loan)	-	-	-
Net Interest expense	**261.06**	**584.02**	**1014.65**

MSEDCL, in its Petition, submitted the funding pattern for capital expenditure schemes to be undertaken in FY 2009-10 and FY 2010-11. MSEDCL submitted that it has adopted the following methodology for the purpose of estimating the requirement of loan drawals for FY 2009-10 and FY 2010-11.

1. The Capital Investment Plan for FY 2006-07 and for the Control Period (FY 2007-08 to FY 2009-10) was earlier prepared based on the estimated project cost of each scheme and envisaged schedule of execution of each scheme. The commission has extended the MYT Control Period for one year up to FY 2010-11.

2. The Financing Plan linked to the Capital Expenditure Plan is prepared based on the existing approved funding and the limitations in terms of infusion of equity or internal accrual.

MSEDCL submitted that it has considered a moratorium period of three years for new loans drawn during FY 2009-10 and FY 2010-11. Further, an interest rate of 13.50% has been assumed for the loans drawn from Power Finance Corporation (PFC) and 13.00% for loans drawn from Rural Electrification Corporation (REC) during FY 2009-10 and FY 2010-11.

The Commission asked MSEDCL to submit the copies of loan agreements for loans raised during FY 2008-09, FY 2009-10 and FY 2010-11 along with source-wise and tranche-wise interest computations for the respective years. MSEDCL submitted that it had entered into numerous loans agreements with Financial Institutions/Banks, and considering the volume of information, MSEDCL submitted sample loan agreement copies.

The Commission enquired regarding the basis for considering interest rate of 13.50% and 13.00% for loans drawn from PFC and REC, respectively. MSEDCL replied that it has considered the interest rates on the basis of effective rates declared by the respective Financial Institutions and submitted the corresponding documents for the same. Based on the documents submitted, the Commission observes that the revision in interest rates by PFC and REC was in range of 11% to 11.5%. Accordingly, the Commission has considered an interest rate of 11.50 % based on latest disbursements for new loans taken from PFC for FY 2009-10 and FY 2010-11. In the context of new loans taken from REC, based on the loan agreements submitted by MSEDCL, it is observed that interest rates for

The funding pattern for the schemes approved by the Commission and considered to be capitalised during FY 2009-10 and FY 2010-11, based on the DPRs submitted by MSEDCL is shown in the Table below:

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

FUNDING PATTERN	FY 2009-10	FY2010-11
TOTAL CAPITALISATION	**461.46**	**876.51**
Less : GRANT	45.28	66.38
Less : CONSUMER CONTRIBUTION	67.40	2.60
FUND REQUIREMENT EXCLUDING GRANT AND CONSUMER CONTRIBUTION	**348.78**	**807.53**
PERCENTAGE		
EQUITY	27.35%	12.19%
DEBT	72.65%	87.81%
EQUITY	95.40	98.44
DEBT	253.38	709.09
TOTAL (DEBT AND EQUITY)	**348.78**	**807.53**

Based on the above, the interest expenses approved by the Commission for FY 2009-10 and FY 2010-11 are shown in the Table below:

Table: Interest Expenses approved by the Commission (Rs Crore)

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by MSEDCL	Approved	Estimate by MSEDCL	Approved
Op. balance of loan	2680.44	4024.67	2254.41	5967.31	2157.37
Loan Addition	459.64	2642.38	253.38	4637.96	709.09
Loan Repayment	(463.70)	(699.74)	(350.42)	(688.16)	(458.38)
Cl. Balance of loan	2676.38	5967.31	2157.37	9917.10	2408.08
Gross Interest Expense	**282.84**	**620.28**	**268.62**	**1071.98**	**334.45**
Less IDC (existing loan)	**(21.78)**	**(36.26)**	**(11.17)**	**(57.33)**	**(13.90)**
Less IDC (new loan)	-	-	-	-	-
Net Interest expense	**261.06**	**584.02**	**257.45**	**1014.65**	**320.55**

4.10 Advance against Depreciation

In view of revision in approved depreciation and approved principal repayment for FY 2009-10 and FY 2010-11, as against that claimed by MSEDCL, the claim for advance against depreciation also needs to be revised. Accordingly, Advance against Depreciation (AAD) projected by MSEDCL and approved by the Commission for FY 2009-10 and FY 2010-11 is as under:

Table: Advance against Depreciation approved by the Commission (Rs Crore)

Particulars	FY 2008-09	FY 2010-11

	APR Order	Revised Estimate by MSEDCL	Approved	Revised Estimate by MSEDCL	Approved
Depreciation	436.13	551.31	424.85	692.45	450.07
Loan Repayment	(463.70)	(699.74)	(350.42)	(688.16)	(458.38)
Advance against depreciation (AAD)	27.57	148.43	0	0	8.32
Depreciation incl. AAD	**463.70**	**699.74**	**424.85**	**692.45**	**458.38**

4.11 Interest on Working Capital and Consumers' Security Deposit and Other Interest & Finance Charges for FY 2009-10 and FY 2010-11

MSEDCL has proposed no expenses towards interest on working capital for FY 2009-10 and FY 2010-11.

MSEDCL further submitted that the Other Interest and Finance Charges consists of guarantee charges, bank and other charges, interest on security deposit, stamp duty and service fee, and the same were computed as discussed below:

- Guarantee Charges: Guarantee Charges (for existing Loans only) is actually worked out against those loans, which are under GoM Guarantee. This includes the loans from PFC, REC and Canara Bank. The charges are calculated at the rate of 1% and 2% as indicated in GoM Resolution on outstanding balance and Interest on particular date, respectively.
- Bank and Other Charges: For FY 2008-09, the bank and other charges actual incurred and reflected in the accounts are to the tune of Rs. 14.98 crore. The same is extrapolated to 50% more for F.Y. 2009-10, and for F.Y. 2010-11, 25% growth in FY 2009-10 level has been projected, considering the new Letter of Credit (LC) required to be given to MSPGCL and other Power Traders in accordance with the terms of Power Purchase Agreement.

- Interest on Consumer Deposits: As the amount of security deposit up to FY 2008-09 is Rs. 3164.18 Crore, the interest on consumer security deposit for the current year and ensuing year is estimated by considering 10% increase in security deposit from consumers and thereon considering an interest rate of 6%, which is the prevailing bank rate of interest. This consideration is according to the MERC Tariff Regulations.

Accordingly, MSEDCL projected the interest and finance charges for FY 2009-10 and for FY 2010-11 as tabulated below:

Table: MSEDCL Projections of Other Interest and Finance Charges ***(Rs Crore)***

	FY 2008-09	**FY 2009-10**	**FY 2010-11**
Interest on Security Deposit	154.86	189.89	208.88
Guarantee Charges	26.01	26.01	26.01
Finance Charges	12.31	18.47	23.09
Stamp Duty	2.26	4.52	9.04
Service Fee	0	0.08	0.16
Total Other Interest & Finance Charges	**243.24**	**238.96**	**267.17**

As regards interest on working capital for FY 2009-10 and FY 2010-11, MSEDCL has submitted that the Interest on working capital is zero. The Commission has recomputed the Interest on Working Capital based on MERC Tariff Regulations and noted that it works out to be Zero and hence, the Commission has accepted the submission of MSEDCL.

As regards interest on consumers' security deposit, the Commission has accepted MSEDCL's projections of the security deposit and has computed the interest on the same at the rate of 6%, in accordance with the MERC Tariff Regulations. The Commission has accepted MSEDCL's projections of guarantee charges and stamp duty. However, Finance

Charges for FY 2009-10 and FY 2010-11 have been considered at the same as the actuals for FY 2008-09, since the Commission has considered lower capital expenditure and capitalisation, and hence, lower loans.

The approved interest on working capital and consumers' security deposit and Other Interest and Finance Charges for MSEDCL for FY 2009-10 and FY 2010-11 is given in the following Table:

Table: Interest on Working Capital and Consumers' Security Deposit and Other Interest & Finance Charges for FY 2009-10 and FY 2010-11 (Rs Crore)

Particulars	**FY 2009-10**			**FY 2010-11**	
	APR Order	**Revised Estimate by MSEDCL**	**Approved After provisional truing up**	**Estimate by MSEDCL**	**Approved**
Interest on Working Capital	0	0	0	0	0
Interest on consumers' security deposits	191	190	190	209	209
Other Interest & Finance Charges	85	49	41	58	41
Total Interest on Working Capital, Security deposits, Other Interest & Finance Charges	**276**	**239**	**230**	**267**	**249**

4.12 Contribution to Contingency Reserves for FY 2009-10 and FY 2010-11

MSEDCL estimated the contribution to contingency reserve as 0.25% of opening GFA for FY 2009-10 and FY 2010-11, amounting to Rs 34 Crore and Rs 41 Crore, respectively, in accordance with the MERC Tariff Regulations.

The Commission has considered the contingency reserve as 0.25% of Opening GFA for both FY 2009-10 and FY 2010-11, based on the revised level of capitalisation considered in this Order. Also, as stated in Section 3 on truing up for FY 2008-09, MSEDCL should ensure that the funds under contingency reserve are invested in approved securities within the time frame specified under the MERC Tariff Regulations.

4.13 Other Expenses

MSEDCL submitted that Other Expenses comprises of compensation for injuries, death and damages to staff and outsiders and miscellaneous charges, etc. MSEDCL estimated the other expenses for FY 2009-10 and FY 2010-11 at Rs. 16.50 Crore and Rs. 17.32 Crore, respectively.

For FY 2009-10 and FY 2010-11, the Commission examined the break-up of Other Expenses and observed that MSEDCL has claimed Bad debts written off from consumers under this head. However, the Commission is already allowing Provisioning for Bad Debts separately, and both, provisioning as well as actual bad debts written off, cannot be allowed, since the amounts actually written off have to be reduced from the provision created by MSEDCL. Also, MSEDCL has claimed provisioning for bad debts from 'Others', which is not allowable under the MERC Tariff Regulations, and MSEDCL has not submitted any justification for the same Hence, the Commission has allowed the Other Expenses as Rs 15.78 Crore and Rs 16.57 Crore for respective years, after reducing the expense on the above two heads.

4.14 Provisioning for Bad Debts

In the APR Petition, MSEDCL submitted that the provisioning for bad debts has been considered as 1.5% of projected revenue for FY 2009-10 and FY 2010-11, which works out to Rs 416 Crore and Rs 504 Crore, respectively.

The Commission has considered provisioning for bad debts at the same rate as last year, i.e., 1.5% of actual/projected revenue from sale of electricity in FY 2009-10 and FY 2010-11, which works out to Rs. 416 crore and Rs. 450 crore for FY 2009-10 and FY 2010-11, respectively.

However, MSEDCL should take efforts to recover the amount receivable, which is increasing every year, or write off the bad debts that are considered as not recoverable, despite MSEDCL's best efforts to recover the same. In case the provisioning for bad debts is not necessitated due to adequate provisioning for bad debts, then the Commission may consider allowing lower amount for the same for FY 2009-10 and FY 2010-11, at the time of truing up, since this is not an actual expense, and is only a book entry.

4.15 Incentives and Discounts

In the APR Petition, MSEDCL projected the expenditure towards incentives and discounts for FY 2009-10 and FY 2010-11 as Rs. 155 Crore and Rs. 163 Crore, respectively. The Commission has accepted MSEDCL's projections in this regard.

4.16 Return on Equity (RoE)

The Commission had permitted return on equity to the extent of Rs 533.83 Crore for FY 2009-10 in the APR Order dated August 17, 2009 at a rate of return of 16% in accordance with the MERC Tariff Regulations. MSEDCL, in its APR Petition, submitted the revised estimate of return on equity for FY 2009-10 as Rs 617 Crore. Further, MSEDCL estimated the return on equity for FY 2010-11 as Rs 687 Crore. The estimates in respect of ROE are as shown in the Table below:

Table: Return on Equity (Rs Crore)

Particulars	FY 2009-10		FY 2010-11
	APR Order	Revised Estimate by MSEDCL	Revised Estimate by MSEDCL
Regulatory Equity at beginning of year	3160.97	3542.87	3919.38
Equity Portion of Capitalised Expenditure	116.96	376.52	501.82
Regulatory Equity at the end of the year	3277.93	3919.38	4421.21
Return on Regulatory Equity at beginning of year	524.47	566.86	627.10
Return on Equity Portion of Capital Expenditure Capitalised	9.36	30.12	40.15
Return on excess portion of equity	0.00	20.17	20.17
Total Return on Regulated Equity	**533.83**	**617.15**	**687.41**

MSEDCL submitted that based on the capitalisation and funding pattern as proposed, the return on equity on the equity portion has been claimed at 16%.

The Commission has computed the RoE for FY 2009-10 and FY 2010-11 on the opening balance of equity as well as equity component of the asset to be capitalised during the year in accordance with the MERC Tariff Regulations. Accordingly, approved Return on Equity for FY 2009-10 and FY 2010-11 is summarised in the following Table:

Table: Return on Equity approved by the Commission (Rs Crore)

Particulars	FY 2009-10			FY 2010-1	
	APR Order	Revised Estimate by MSEDCL	Approved	Revised Estimate by MSEDCL	Approved
Regulatory Equity at beginning of year	3160.97	3542.87	3185.19	3919.38	3280.59
Equity Portion of Capitalised Expenditure	116.96	376.52	95.40	501.82	98.44

Particulars	FY 2009-10			FY 2010-1	
	APR Order	Revised Estimate by MSEDCL	Approved	Revised Estimate by MSEDCL	Approved
Regulatory Equity at the end of the year	3277.93	3919.38	3280.59	4421.21	3379.03
Return on Regulatory Equity at beginning of year	524.47	566.86	509.63	627.10	524.89
Return on Equity Portion of Capital Expenditure Capitalised	9.36	30.12	7.63	40.15	7.87
Return on excess portion of equity	0.00	20.17	0.00	20.17	0.00
Total	**533.83**	**617.15**	**517.26**	**687.41**	**532.77**

4.17 Income Tax for FY 2009-10 and FY 2010-11

MSEDCL submitted that it has not proposed any Income Tax for FY 2008-09 and FY 2009-10 and has requested the Commission to allow the payment of income tax on the basis of Advance Tax in the respective years. However, MSEDCL also submitted that no payment of advance Income tax has been made for FY 2009-10.

In reply to the confirmation sought by the Commission, MSEDCL has confirmed that it has not paid any income tax or advance tax for FY 2009-10, and hence, the Commission has not considered any expenditure towards income tax for FY 2009-10, since the same is based on the actual payment.

Considering the past trend and the fact that MSEDCL is yet to pay income tax for FY 2010-11, the Commission is of the view that there is no need to load the consumers' tariff on this account at this point in time. Hence for FY 2010-11, the Commission has not allowed any expense towards income tax payment. However, if any income tax is actually paid by MSEDCL, then the same will be allowed at the time of truing up.

4.18 Non-Tariff Income for FY 2009-10 and FY 2010-11

MSEDCL submitted that non-tariff income for MSEDCL consists of income from interest on consumer arrears, interest on delayed payments, recoveries from theft of power, rebate on power purchase, interest on other investments, income from rents, etc.

MSEDCL submitted that interest on delayed payments and interest on arrears forms the largest component of Non-Tariff Income, accounting for over 56% of the total amount. MSEDCL projected the total non-tariff income for FY 2009-10 and FY 2010-11 as Rs 1381.14 Crore and Rs 1450.20 Crore, respectively. MSEDCL submitted that for forecasting the Non-Tariff Income for FY 2010-11, MSEDCL has considered an escalation of 5% over the estimated Non-Tariff Income for FY 2009-10, which is mainly on account of considering the increase in the income from interest on delayed payments. MSEDCL submitted that the interest on Contingency Reserve Funds is also included in the Non Tariff Income.

The Commission has accepted the submissions of MSEDCL in this regard. Accordingly, the Non Tariff Income considered by the Commission for FY 2009-10 and FY 2010-11 is given in the Table below:

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

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by MSEDCL	Approved After provisional truing up	Estimate by MSEDCL	Approved
Non Tariff Income	1031	1381	1381	1450	1450

As regards income from wheeling charges, MSEDCL has not projected any income from wheeling charges for FY 2009-10 and FY 2010-11. However, the Commission has considered this income as Rs. 15 Crore for FY 2009-10 and FY 2010-11, which is based on the actual income from wheeling charges earned by MSEDCL in FY 2008-09.

4.19 Revenue from existing tariff for FY 2009-10 and FY 2010-11

In the APR Petition, MSEDCL has computed the revenue from existing tariffs for FY 2009-10, on the basis of the category-wise sales and the prevailing category-wise tariffs, as Rs. 27720 Crore. For FY 2010-11, MSEDCL estimated the revenue from sale of electricity as Rs. 29940 Crore, on the basis of the projected sales during this period and the prevailing category-wise tariffs.

The Commission asked MSEDCL to submit the details of the actual category-wise sales and actual revenue earned through the sales to different consumer categories in FY 2009-10. MSEDCL in its reply to datagaps dated August 23, 2010, submitted that revenue from sale of power as Rs 26618 Crore, after deducting revenue from ZLS schemes. MSEDCL also submitted that

> *"The revenue shown in Annexure to query no.10 is as per tariff determined by Hon'ble Commission vide its Order dated 17th August 2009 and it excludes the revenue earned due to TOSE & Electricity duty. It is further submitted that the RLC & ASC refund has been considered as expenditure."*

The Commission observed that the MSEDCL has claimed RLC and ASC refund of Rs 1092 Crore as an expense in FY 2009-10, while computing revenue gap of Rs 335 for provisional truing-up of FY 2009-10. Since, MSEDCL was allowed to recover these expenses through the tariff, and MSEDCL has paid out these amounts, it follows that MSEDCL has also earned this amount, though the same has not been explicitly shown under the actual revenue from sale of electricity, and there is only a remark that RLC and ASC refund has been considered as expenditure.

Hence, the Commission has added Rs 1092 Crore to the actual revenue income submitted by MSEDCL, which works out to Rs 27710 Crore for FY 2009-10.

It may also be noted that in its APR Petition, MSEDCL had submitted Revenue Income for FY 2009-10 as Rs 28974 Crore, which is around Rs 1084 Crore higher that the revenue income considered by the Commission under the provisional true up. This may be primarily because MSEDCL has computed revenue from existing tariffs by applying the revised tariff applicable from August 2010 to the sales of entire year and thus, overstated revenue, as tariff applicable in first four months was lower. The Commission also observed that while calculating revenue from sale of power for LT IV Agriculture, MSEDCL has considered additional charge approved for four months by the Commission for the entire year, which has resulted in over-statement of revenue from sale of power by Rs 174 Crore.

For FY 2010-11, the Commission has estimated the revenue from sale of electricity on the basis of the revised sales projected by the Commission for this period. The expected revenue from sale of electricity to consumers at existing tariffs for FY 2010-11 works out to Rs. 29993 crore. This revenue includes the annual standby charges of Rs. 396 crore payable by Mumbai licensees, viz., RInfra-D, BEST and TPC-D, for the standby facility provided by MSEDCL.

It may be noted that while computing revenue from existing tariffs, MSEDCL has not considered the FAC component of the existing tariffs (average FAC charged in FY 2009-10 was Rs. 0.26 per kWh), even though FAC is a part of the tariff, and the consumers are paying the same. Ideally, the FAC component should have been considered while computing the revenue from existing tariffs, in order to convey the correct impact of the revised tariffs to the consumers. However, since MSEDCL has not considered the FAC component while computing the revenue from existing tariffs and revenue gap, the Commission has also not considered the same in its computations, to ensure like-to-like comparison.

4.20 Provision for RLC Refund

MSEDCL submitted that it has considered Rs 500 Crore as a provision for refund of Regulatory Liability Charges (RLC) for FY 2009-10. MSEDCL also submitted that it has not considered any provision for RLC refund for FY 2010-11.

The Commission has considered the amount of Rs. 500 crore towards RLC refund in FY 2009-10 and FY 2010-11, since the contribution of RLC was in the nature of interest-free loans given by selected consumer categories to MSEDCL, which needs to be refunded.

4.21 ASC Refund

The Commission has noted with great satisfaction that MSEDCL has made ASC refund of Rs 592 Crore for FY 2009-10 to the concerned consumers as directed by the Commission.

4.22 Other Claims

4.22.1 Impact of Review Order in Case No. 63 of 2009

MSEDCL filed a Review Petition in the matter of APR Order dated August 17, 2009. The Commission ruled that pending the audit review of Bhiwandi DF, to partly mitigate MSEDCL's difficulties, an adhoc amount of Rs. 200 Crore would be considered at the time of truing-up of FY 2009-10. MSEDCL has claimed the said amount in the revenue gap of FY 2010-11. The Commission has accepted the submission of MSEDCL, in this regard, and directs MSEDCL to expedite the audit of Bhiwandi DF area and submit the Report to the Commission within 2 months of the issue of this Order.

4.22.2 Consideration of surplus of Rs. 214 crore

MSEDCL has preferred an appeal in the matter relating to provisional true-up of FY 2008-09 in Case No. 116 of 2008, in which the Commission has considered a surplus of Rs. 214 Crore instead of deficit of Rs. 213 Crore on account of true-up of FY 2006-07. The matter is sub-judice, hence, the same treatment has been continued till the final Judgment on same is received, subject to the prudence check.

4.22.3 Treatment of loss reduction incentive for FY 2007-08

MSEDCL has submitted the it has preferred an appeal in the matter relating to true-up for FY 2007-08 in Case No. 116 of 2008, the Commission has considered Rs. 176.17 crore to be utilised for part refund of RLC in FY 2009-10. MSEDCL in this Petition has not claimed the same. The matter is sub-judice, hence, the same treatment has been continued, the final judgement on same is received, subject to the prudence check.

4.22.4 Consideration of 4% distribution loss for FY 2009-10

The Commission has approved 4% loss reduction in line with MYT order, as compared to 1% loss reduction proposed by MSEDCL in APR of FY 2008-09 in Case No. 116 of 2008. MSEDCL has preferred an Appeal before Appellate Tribunal of Electricity on this issue of consideration of additional sales on account of normative loss, thus resulting in additional revenue from surplus energy. However, MSEDCL submitted that for the purpose of this Petition, it has considered Rs. 750 crore as excess revenue in the provisional true-up of FY 2009-10. The Commission has also considered additional revenue of Rs 750 Crore, while doing provisional truing up of FY 2009-10.

4.23 Aggregate Revenue Requirement & Revenue Gap of MSEDCL for FY 2009-10 and FY 2010-11

Based on the above expenses approved by the Commission, the Aggregate Revenue Requirement approved by the Commission for MSEDCL for FY 2009-10 and FY 2010-11 is given in the following Tables:

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

Sl.	Particulars	FY 2009-10		
		APR Order	Revised Estimate by MSEDCL	Approved
1	Power Purchase Expenses	19898	21049	21373
2	Operation & Maintenance Expenses			
2.1	Employee Expenses	2512	2678	2402

Sl.	Particulars	FY 2009-10		
		APR Order	Revised Estimate by MSEDCL	Approved
2.2	Administration & General Expenses	213	363	245
2.3	Repair & Maintenance Expenses	482	659	481
3	Depreciation, including advance against depreciation	464	700	425
4	Interest on Long-term Loan Capital	261	584	253
5	Interest on Working Capital, consumer security deposits and Finance Charges	276	239	230
6	Provision for Bad Debts	407	416	416
7	Other Expenses	5	16	16
8	Income Tax	0	0	0
9	Transmission Charges	1494	1494	1492
10	Contribution to contingency reserves	29	34	28
11	Incentives/Discounts	81	155	155
12	**Total Revenue Expenditure**	**26122**	**28388**	**27516**
14	Return on Equity Capital	534	617	517
15	**Aggregate Revenue Requirement**	**26656**	**29005**	**28033**
16	Less: Non Tariff Income	(1031.00)	(1381.14)	(1381.14)
17	Less: Income from wheeling charges	(6.00)		(14.69)
18	Less: Amount given by the State Government to meet power purchase expenses	(400.00)	(400.00)	(400.00)
19	Truing up for FY 2007-08	551.00	551.00	551.00
20	Truing up for FY 2008-09	981.00	981.00	421.38
21	Review Petition: Interest Expenses &AAD disallowed in FY 2006-07	61.00	61.00	61.00
22	ATE Judgment: Allowance of Employee and A&G expenses for FY 2005-06	103.00	103.00	103.00

Sl.	Particulars	FY 2009-10		
		APR Order	Revised Estimate by MSEDCL	Approved
23	less: Additional Revenue from Surplus Energy Available	(750.00)	(750.00)	(750.00)
24	**Aggregate Revenue Requirement from Retail Tariff**	**27257**	**29262**	**27716**
25	**Revenue from Sale of Power at Existing Tariff**	**27257**	**28794**	**27710**
27	**Revenue Gap**	**0**	**468**	**6**

The Aggregate Revenue Requirement for FY 2009-10 is lower than that projected by MSEDCL, primarily due to the following reasons:

- Reduction in O&M expenses, in accordance with the Commission's philosophy as regards allowance of controllable expenses like employee expenses, A&G expenses and R&M expenses.
- Due to non-submission of cost-benefit analysis of the proposed capitalisation, there is reduction in interest expenses, depreciation, Other Interest and Financing charges, and return on equity components.
- Consideration of truing-up requirement of Rs 421 Crore for FY 2008-09, as compared to MSEDCL's claim of Rs 981 Crore, largely on account of non-consideration of surpluses of previous years by MSEDCL, amounting to Rs. 683 crore.
- The Commission has considered higher revenue gap, by considering the actual revenue income for FY 2009-10, which is lower by Rs 1084 Crore as compared to MSEDCL' submission in its APR Petition. This may be primarily because of the fact that in its APR Petition, MSEDCL has applied the revised tariff (applicable from August 2010) to sales of entire year and thus, overstated revenue, as tariff applicable in first four months was lower.
- Also, it is observed that while calculating revenue from sale of power for LT IV Agriculture, MSEDCL has considered additional charge approved for four months

by the Commission for the entire year and hence, overstated revenue from sale of power by Rs 174 Crore.

- The Commission has considered higher power purchase expenses, as compared to that projected by MSEDCL, and hence, this benefits MSEDCL
- The Commission observed that revenue from sale of power under approved column of 'Total Revenue' has been considered by MSEDCL as Rs 27124 crore, whereas the Commission has allowed Rs 27257 Crore, since, the entire approved revenue gap was allowed by the Commission while determining tariff for FY 2009-10. The Commission also noted that MSEDCL has erroneously represented approved revenue gap as Rs 133 Crore, which should have been Zero, as entire approved revenue gap was allowed as a part of tariff. This has resulted in under-statement in revenue gap by Rs 133 Crore.

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

Sl.	**Particulars**	**FY 2010-11**	
		MSEDCL Petition	**Approved**
1	Power Purchase Expenses	25605	24213
2	Operation & Maintenance Expenses		
2.1	*Employee Expenses*	*2837*	*2591*
2.2	*Administration & General Expenses*	*417*	*262*
2.3	*Repair & Maintenance Expenses*	*725*	*510*
3	Depreciation, including advance against depreciation	692	458
4	Interest on Long-term Loan Capital	1015	305
5	Interest on Working Capital, consumer security deposits and Finance Charges	267	249
6	Provision for Bad Debts	504	450
7	Other Expenses	17	17
8	Income Tax	0	0
9	Transmission Charges	2052	1879
10	Contribution to contingency reserves	41	29

Sl.	Particulars	FY 2010-11	
		MSEDCL Petition	Approved
11	Incentive for FY 2008-09 for reduction in Distribution Losses		
12	Incentives/Discounts	163	163
15	**Total Revenue Expenditure**	**34335**	**31128**
16	Return on Equity Capital	687	533
17	**Aggregate Revenue Requirement**	**35022**	**31660**
18	Less: Non Tariff Income	(1450.20)	(1450.20)
19	Less: Income from wheeling charges		(14.69)
20	**Aggregate Revenue Requirement from Retail Tariff**	**33572**	**30196**
21	**Revenue from Sale of Power at Existing Tariff**	**29940**	**29993**
22	**Revenue Gap**	**3632**	**203**

The Aggregate Revenue Requirement for FY 2010-11 is lower than that projected by MSEDCL, mainly due to the following reasons:

- Reduction in power purchase expenses mainly due to consideration of lower corresponding power purchase quantum, due to the lower distribution losses considered by the Commission for FY 2010-11, as the Commission has considered target distribution loss of 17.20%, as compared to MSEDCL's projection of 19.98%
- Reduction in the tariff payable to MSPGCL, vis-a-vis that considered by MSEDCL in its projections, in accordance with the Tariff Order for MSPGCL, dated September 12, 2010 in Case No. 102 of 2009, which has resulted in savings of Rs. 675 crore, while at the same time, around 2500 MU has been considered available from MSPGCL. Hence, this does not affect MSEDCL.
- Reduction in transmission tariff payable by MSEDCL by around Rs. 173 crore, due to the downward revision in the transmission tariff, as determined in a separate Order in Case No. 120 of 2009. Hence, this does not affect MSEDCL.
- Reduction in O&M expenses, in accordance with the Commission’s philosophy as regards allowance of controllable expenses like employee expenses, A&G

expenses and R&M expenses on normative basis.

- Reduction in proposed capitalisation and consequent reduction in interest expenses, depreciation, Other Interest and Financing charges, and return on equity components.
- MSEDCL has considered entire sales without excluding ZLS sales for the purpose of revenue calculation, thereby, overstating the revenue from sale of power.

Thus, the Commission has considered a revenue gap of Rs. 6 Crore and Rs. 203 Crore for FY 2009-10 and FY 2010-11, respectively, as compared to MSEDCL's projections of revenue gap of Rs. 335 Crore and Rs. 3632 Crore for FY 2009-10 and FY 2010-11, respectively.

5 TARIFF PHILOSOPHY AND CATEGORY-WISE TARIFFS FOR FY 2010-11

5.1 Applicability of Revised Tariffs

The revised tariffs will be applicable from September 1, 2010. In cases, where there is a billing cycle difference for a consumer with respect to the date of applicability of the revised tariffs, then the revised tariff should be made applicable on a pro-rata basis for the consumption. The bills for the respective periods as per existing tariff and revised tariffs shall be calculated based on the pro-rata consumption (units consumed during respective period arrived at on the basis of average unit consumption per day multiplied by number of days in the respective period falling under the billing cycle).

The Commission has determined the tariffs and revenue from revised tariffs as if the revised tariffs are applicable for the entire year. The Commission clarifies that any shortfall/surplus in actual revenue vis-à-vis the revenue requirement approved after truing up, due to the applicability of the revised tariffs for only seven months of FY 2010-11, will be trued up at the end of the year.

5.2 Consolidated Revenue Gap

The summary of revenue gap as projected by MSEDCL is summarised below:

Sl.	Particulars	Rs. Crore	%
1	True Up requirement for FY 2008-09	-1	0%
2	Provisional True Up for FY 2009-10	335	1%
3	Revenue Gap of FY 2010-11	3632	12%
4	Revenue Gap (1+2+3)	3966	13%
5	Review Petition: Bhiwandi sales revenue impact allowed in Review Order	200	1%
6	**Total Revenue Gap (4+5)**	**4166**	**14%**

Accordingly, MSEDCL submitted that an average tariff increase of 13.92% would be required to mitigate the revenue gap of MSEDCL.

In Section 3 and Section 4 of this Order, the Commission has deliberated on the revenue gap/(surplus) for FY 2008-09, FY 2009-10 and FY 2010-11, as projected by MSEDCL and as approved by the Commission.

The consolidated revenue requirement for FY 2010-11 has been computed as shown in the following Table, by adding the revenue gap of FY 2008-09 after final truing up, revenue gap of FY 2009-10 after provisional truing up, and revenue gap of FY 2010-11 on a stand-alone basis with existing tariffs, and the Commission's ruling on Other Claims submitted by MSEDCL, as elaborated in Section 4.23 of this Order.

Table: Consolidated Approved Revenue Gap in FY 2010-11 ***(Rs Crore)***

Sl.	Particulars	MSEDCL	Approved by the Commission
1	True-up Requirement of FY 2008-09	(1)	0
2	Provisional True-up Requirement of FY 2009-10	335	6
3	Revenue Gap of FY 2010-11	3632	203
4	Review Petition: Bhiwandi Sales revenue impact allowed in the Review Petition	200	200
5	RLC Refund		500
6	**Total Revenue Gap**	**4166**	**909**

7	Revenue from Sale of Power at Existing Tariff for FY 2010-11	29940	29993
8	**Average Percentage Increase in Tariff required to meeting the Revenue Gap**	**14%**	**3.03%**

As can be seen from the above Table, the consolidated revenue gap estimated by the Commission for FY 2010-11 works out to Rs. 909 crore, as against the revenue gap of Rs. 4166 crore projected by MSEDCL in the APR Petition. The effective average tariff increase required vis-à-vis the revenue from existing tariffs in FY 2010-11, works out to 3.03%, as compared to 13.9% tariff increase projected by MSEDCL in the APR Petition.

5.3 Tariffs philosophy Proposed by MSEDCL

MSEDCL submitted that the revenue from proposed tariffs in FY 2010-11 has been estimated by applying the proposed rates to the projected sales and consumer related data according to the segregation provided by the Commission in its previous tariff order dated August 17, 2009. MSEDCL added that it has also included the impact of recovery of additional capacity charges of RGGPL as approved by Commission in its Order dated March 31, 2010 (Case No. 115 of 2009). MSEDCL submitted that it has considered the following while determining proposed tariff for FY 2009-10.

- Minor increase in tariff for Agriculture (HT & LT), LT Domestic (BPL & up to 100 units) and increase of demand charges as proposed in the Petition.
- Restoration and / or rationalisation of the fixed charge to ensure recovery of fixed cost from all consumers except LT agricultural consumers, LT PWW consumers, LT Streetlight consumers as well as LT IX cremation and burial grounds.
- The energy charge of HT I (Express Feeder) consumers are proposed to be 10% higher when compared to HT I (Non-Express Feeder) as a premium for providing continuous supply.
- Two sub-categories are proposed under HT II commercial
    a. Government Owned and/or aided educational institutes and Hospitals,
    b. Other consumers like Malls, Multiplexes, and Private/Trust Hospitals, etc., and no tariff hike for sub-category (a).

- Two sub-categories are proposed in LT II commercial
    a. All Education institutions, Hospitals& Dispensaries.
    b. Other non-residential and commercial consumers and no tariff hike for sub-category (a)
- Energy charge for remaining categories of consumers have been appropriately increased to ensure bridging of revenue gap after carrying out above-mentioned considerations.

The tariff philosophy and category-wise tariffs determined by the Commission have been detailed in a subsequent sub-section in this Order.

Further, MSEDCL also made certain suggestions regarding the tariff philosophy to be adopted by the Commission, which are summarised below, along with the Commission's ruling on the same:

(a) Restoration of Fixed Charges

MSEDCL submitted that the Commission has been adopting the policy of recovering the fixed costs of MSEDCL through levy of Fixed Charges. MSEDCL added that the Commission, in its Order dated December 1, 2003, stated that the Commission has continued the process of increasing the recovery of fixed costs by levy of fixed charges to safeguard the erstwhile MSEB from steep fluctuations in revenue with varying consumption over time. Further, the Commission increased the fixed charges and ruled that if the Utility is not allowed to recover fixed cost for the period of interruptions and low voltage period, it would adversely affect the financial viability of the Utility.

MSEDCL submitted that the Commission, in its Tariff Order issued in June 2008, unilaterally decided to reduce the fixed charges applicable to different categories of consumers citing the reduced availability of power supply. MSEDCL further submitted that the reduction of fixed charges may not be correct for some categories like HT-I Industries (Express feeder), HT PWW (Express feeder), etc., that are exempted from load shedding. Similarly, in case of HT Industries (Non-express feeder) and HT-PWW (Non-express feeder) consumers are subjected to limited duration of load shedding and during the remaining period, these consumers are provided regular supply of power. MSEDCL added that the Commission's decision to reduce the fixed charges defeats the principle laid down in the Tariff Order dated May 5, 2000, where the Commission ruled that the fixed costs should be recovered through the fixed charges and observed that the fixed charged component of tariff needs to be gradually increased.

MSEDCL submitted that the fixed charges for all categories except BPL need to be gradually increased so as to recover the fixed cost through fixed charges. MSEDCL also requested the Commission to decide a road map to gradually increase the fixed charges, such that the fixed costs are fully recovered through the fixed charge component of tariff.

Commission's Ruling

MSEDCL had raised the same contentions in its previous APR Petition also, and the Commission had given a detailed ruling as under:

> *"In the previous APR Order for MSEDCL, the Commission had consciously reduced the fixed/demand charges, in response to the several objections submitted by stakeholders in this context. In the APR Order for FY 2007-08 for MSEDCL, the Commission observed as under:*
>
> > *"The Commission has reduced the fixed charges/demand charges applicable for different consumer categories, and correspondingly increased the energy charges, so that the bills are more directly linked to the consumption. Economic theory states that the recovery of fixed costs through fixed charges should be increased, so that a reasonable portion of the fixed costs are recovered through the fixed charges. However, the ability of the Licensees to supply reasonably priced power on continuous basis has been eroded due to the stressed demand-supply position in recent times, and hence, the Commission has reduced the fixed charges. This will provide certain relief to the consumers who have lower load factor, as the consumers will be billed more for their actual consumption rather than the load, and the licensees also have an incentive to ensure that continuous 24 hour supply is given to the consumers. As and when sufficient power is available and contracted by the*

licensees, the fixed charges can again be increased, and energy charges reduced correspondingly."

As stated in the previous APR Order, the fixed/demand charges were reduced only as a measure to incentivise MSEDCL to contract for the necessary power requirement and ensure continuous supply of power to its consumers. MSEDCL has also admitted in the present APR Petition that there has been no adverse impact on the revenue of MSEDCL due to the reduction of fixed/demand charges. Since, MSEDCL claims that it is striving to contract for the necessary power to meet the demand requirements, there would be no loss to MSEDCL in future also. Hence, the Commission rejects MSEDCL's request to increase the fixed/demand charges. The Commission has retained the fixed/demand charges for all consumer categories at the existing level."

Firstly, the reduction in fixed/demand charges by the Commission was not unilateral, as claimed by MSEDCL, and were in response to the repeated submissions made by the consumers, who were suffering from increased levels of load shedding, and had low load factors in some cases, due to business cycles. The Commission has already clarified that once sufficient power is available and contracted by the licensees, the fixed/demand charges can again be increased, and energy charges reduced correspondingly. Further, MSEDCL had confirmed in its previous APR Petition that there has been no adverse impact on MSEDCL due to the reduction in fixed/demand charges.

(b) Express Feeder Charge for HT-II Commercial Category

MSEDCL submitted that the Commission has already determined a separate tariff for the industrial category consumers connected on express feeder, and has levied a higher tariff for industries connected on express feeders to reflect the availability of 24x7 supply. MSEDCL further submitted that similar situation exists in respect of HT II Commercial category of consumers which inter-alia includes Research & Development Centres, Hospitals, Educational Institutions or for any other consumer requiring and affording to pay higher charge in lieu of 24 x 7 supply.

MSEDCL added that submission of consumption data for the proposed category need not be pre-condition for creating a new category so as to address practical issues, and since, overall revenue is addressed under the true-up mechanism. MSEDCL further submitted that it was submitting the data regarding HT II commercial consumers connected on express feeders, and this option would be totally at the discretion of the consumers. MSEDCL proposed levy of 10% additional charge over the base energy charge for HT II Commercial category consumers connected on express feeders in accordance with the principles followed by the Commission in deciding tariff for HT I Industries (Express Feeders) and HT I Industries (Non-Express Feeders) consumers.

Commission's Ruling

In its Order dated August 17, 2009 in Case No. 116 of 2008, the Commission has determined higher tariffs for HT I Industrial category connected on express feeders (Rs. 5.05 per kWh) vis-a-vis HT II industrial category connected on non-express feeders (Rs. 4.60 per kWh). Similarly, the tariffs for HT IV PWW category connected on express feeders is higher (Rs. 3.50 per kWh) than that for HT IV PWW category connected on non-express feeders (Rs. 3.40 per kWh). The tariff differentiation is intended to reflect the fact that consumers connected on express feeders are receiving continuous supply on 24x7 basis, whereas consumers connected on non-express feeders are subjected to load shedding or staggering day, as the case may be. MSEDCL has suggested that the same dispensation should be extended to HT II Commercial category consumers also, since HT II Commercial category consumers connected through express feeders are not being subjected to load shedding.

In case of HT I industrial consumers, the consumers have the option of opting for non-continuous supply, despite being connected on express feeders, in case they are desirous of being levied a lower tariff. Since, HT II Commercial category consumers connected on express feeders are getting the benefit of continuous supply, the Commission accepts MSEDCL's proposal for levy of a higher tariff for such consumers vis-a-vis other HT II commercial category consumers connected on non-express feeders. The differential tariff has been determined in subsequent sub-sections of this Order.

For the base scenario for computing revenue, it has been assumed that all HT II commercial category consumers connected on express feeders will continue to get 24x7 supply and will be levied the higher tariff determined by the Commission. In case any HT II Commercial consumer communicates in writing to MSEDCL that he does not want continuous supply, then MSEDCL should undertake load shedding in accordance with the prevalent load shedding protocol for such consumer and levy the tariff applicable for non-express feeder under HT II commercial category, for such time, as the non-continuous supply is continued.

(c) Pre-paid metering

MSEDCL submitted that it has embarked on an ambitious plan for pre-paid metering (initially the same will be optional for the consumers). MSEDCL further submitted that it has already submitted a detailed proposal and the road map for pre-paid metering. In the said petition (Case No 76 of 2009) MSEDCL has proposed an incentive of 5% in the tariff so as to promote the use of pre-paid metering.

MSEDCL submitted that pre-paid metering will be beneficial to a certain category of consumers and will also help MSEDCL in its day-to-day operations. MSEDCL further requested the Commission to consider the proposal and include the provisions of pre-paid metering while deciding the tariff for FY 2010-11.

Commission's Ruling

The Commission has issued the Order dated April 26, 2010 in Case No. 76 of 2009, on the Petition filed by MSEDCL seeking approval for pre-paid metering. In the above-said Order, the Commission ruled as under:

> *"a) The Petitioner's proposal to introduce prepaid metering is in line with the directives*
> *given by the Commission through its Tariff Orders in the past. The coverage of the prepaid metering scheme needs to be broad-based and ensure adequate representation of different regions and consumer categories, while at the same time keeping in mind the operational difficulties. The proposed sample size of 25000 prepaid meters proposed by the Petitioner is approved and should cover LT single phase residential consumers, LT Commercial category consumers and LT temporary category consumers.*
> *b) The Commission feels the need to point out that Section 47(5) of the EA 2003 provides that "A distribution licensee shall not be entitled to require security in pursuance of clause (a) of sub-section (1) if the person requiring the supply is prepared to take the supply through a pre-payment meter." Accordingly, the*

Petitioner shall not recover from consumers any security deposit when it is supplying electricity through a pre-payment meter.

...

l) It is necessary to give some kind of incentive to consumers in order to incentivise them to shift to prepaid metering, and the amount of incentive would have to be quantified based on the savings accruing to the distribution licensee. To start with, the Petitioner has proposed to offer 5 per cent discount on every purchase of electricity credit to the consumers who opt for prepaid metering. It needs to be clarified whether the 5% discount is on the entire monthly bill or only energy charges, since the implications will be different.

m) As regards, the rate of Electricity Duty (ED) as well as Tax on Sale of Electricity (TOSE) the same is determined by the State Government and is not within the purview of the Commission. The licensee may not, therefore offer any discount on the ED and TOSE amount without express approval of the State Government.

..."

Accordingly, the Commission rules that consumers opting to pay their bills through a pre-paid meter will be entitled to a 5% rebate on their monthly bill (excluding Electricity Duty and Tax on Sale of Electricity), since the entire bill is being paid in advance.

(d) Release of Supply at a voltage below prescribed voltage

MSEDCL submitted that the Commission is already aware of the genuine difficulties in releasing power supply to larger loads at prescribed voltage levels. MSEDCL requested the Commission to grant the prayers made by MSEDCL in its Petition in Case No. 71 of 2009.

MSEDCL submitted that the applicability of proposed surcharge of 2% will have to be include all such consumers who have been released power supply at a voltage level below the prescribed voltage level, irrespective of the date of connection. MSEDCL added that the proposed surcharge will be applicable prospectively for the consumers who are not yet covered under this levy. MSEDCL further submitted that this levy of 2% is only on the units (i.e., for the energy charges only) and not on any other component of tariff.

MSEDCL added that the Commission has already given a favourable dispensation for all consumers (above 10 MVA also) covered under the said Petition subject to concrete technical feasibility.

Commission's Ruling

The Commission has issued the Order dated March 5, 2010 on the Petition filed by MSEDCL seeking approval for levy of 2% voltage surcharge for release of connections at lower than specified voltage. In the above-said Order, the Commission ruled as under:

> *"15. MSEDCL should ensure that supply is released in accordance with the voltages specified in the SoP Regulations for release of electricity supply connections. However, in certain circumstances as highlighted by MSEDCL and reproduced below, there could be a need to release the supply connection at lower voltages:*
>
> *(i) Space constraint for construction of EHV sub-station*
> *(ii) Time required for construction of EHV sub-station*
> *(iii) Right of way/Way Leave/clearance problems*
> *(iv) Non-availability of prescribed voltage level infrastructure*
>
> *It is clarified that even in the above instances, the electricity supply may be released at lower voltages only under exceptional circumstances, and that too only as an interim solution, and the distribution licensee has to ensure that the supply is given at the specified voltage at the earliest. It is further clarified that the cost of EHV sub-station and the consumer's inability to afford the EHV sub-station cannot be a ground for releasing supply at lower voltages, as the SoP Regulations do not make any allowances in this regard, and more consumers may claim non-affordability as a ground for release of supply at lower voltages.*
> *16. Further, the Commission is presently in the process of amending the SoP Regulations and one of the amendments being proposed is in the context of the specified voltages depending on the different loads required to be sanctioned. Hence, the applicability of the Voltage Surcharge would depend on the supply voltages specified in the final notified amended SoP Regulations.*

> *17. At the same time, it cannot be denied that the distribution losses, including transformation losses, will increase on account of supply to consumers at voltages lower than that specified in the SoP Regulations. Accordingly, till such time as the detailed technical study is undertaken and the Commission approves the levy of Voltage Surcharge based on detailed deliberations in this regard, the Commission approves MSEDCL's request for interim relief seeking permission to levy Voltage Surcharge of 2% additional units to be billed, for supply to the consumers at voltages lower than that specified in the SoP Regulations. It is clarified that this Voltage Surcharge shall apply from the date of issue of this Order, till such time as the Commission issues further orders."*

Accordingly, the till such time as the detailed technical study is undertaken and the Commission approves the levy of Voltage Surcharge based on detailed deliberations in this regard, the Commission approves MSEDCL's request for permission to levy Voltage Surcharge of 2% additional units to be billed, for supply to the consumers at voltages lower than that specified in the SoP Regulations. Further, the Commission has accepted MSEDCL's request in the above-said Petition, and it is hereby clarified that the above Interim Relief is applicable for the consumers connected on Non Express Feeders (more than one connection on the said feeder), and in case only one connection exists on the said dedicated feeder, the tariffs should be charged on the basis of consumption recorded by the meters installed at the source of supply (EHV Level) and at the consumer’s end (Premises), whichever is higher, without any levy of voltage surcharge.

Moreover, the Commission, in its Order dated July 19, 2010 in Case No. 93 of 2009, on the Petition filed by MSEDCL seeking approval for the supply of power above 10 MVA at 22 kV level through independent dedicated distribution facility at Rajiv Gandhi Infotech park, Hinjewadi, observed that the Commission cannot deal on case to case basis on such type of matters. At the same time, the Commission also reiterated its concerns regarding non-discriminatory approach and directed MSEDCL to form a Technical Committee to find a technical solution by studying various issues such as up to what extent relaxation is allowed in voltage or load, how different foreign countries execute the project in similar conditions, are there any technological solutions available, etc.

(e) Removal of FAC Cap and Approval for Proportionate FAC

MSEDCL submitted that the existing mechanism of recovery of variation in cost of fuel and power purchase through the Fuel Adjustment Cost formula does not permit levy of monthly FAC exceeding 10% of variable component of the prevailing tariff. MSEDCL submitted that the Commission can modify the ceiling. MSEDCL submitted that the State of Maharashtra is facing acute shortage of power and as a result of limited availability of power throughout the country; the cost of power has increased abnormally. In its efforts to restrict the duration of load shedding, MSEDCL procures all the available power from the market at a considerably higher price. However, MSEDCL needs to pass on this additional burden to the consumers through the FAC Formula but is limited by the ceiling of 10% of the variable component of tariff. The under-recovered FAC is carried forward to future periods, resulting in additional carrying cost, which only increases the un-recovered amount and the same amounts to notional relief. MSEDCL submitted that FAC mechanism is meant to defray expenses relating to increase in fuel and power purchase expenses beyond the reasonable control and within the efficiency parameters laid down by the Commission. Moreover, the 10% ceiling does not serve the purpose for which it is intended, since the consumer has to subsequently pay for such increase either through FAC or through energy charges in the subsequent truing up process. On the contrary, such ceiling unnecessarily aggravates the liquidity problems and adversely affects the financial health of MSEDCL.

MSEDCL added that under the EA 2003, there is no such binding provision restricting levy of FAC to the maximum of 10% of the variable component; rather, the various provisions of the EA 2003 emphasize the need for full cost recovery of fuel cost. MSEDCL further submitted that the Tariff Policy also specifically prescribes that the uncontrollable cost should be recovered speedily to ensure that future consumers are not burdened with past cost.

In view of this, MSEDCL requested the Commission to remove the ceiling of 10% on FAC recovery so as to ensure that the full eligible amount of increase in power purchase cost is recovered through FAC.

As regards levy of proportionate FAC, MSEDCL submitted that the FAC being a component of ‘energy charge’ and the energy charge being different for different categories of consumers, FAC also needs to be levied to the different categories in proportion to the energy charge as applicable to the respective category. MSEDCL added that MSEDCL is facing lot of hardship in recovering even the regular (base tariff) energy bill from consumer categories like BPL Domestic, LT and HT Agricultural, etc. The levy of FAC at a uniform rate to these categories of consumers does not really serve the purpose for which it was intended, and may further worsen the liquidity / cash flow of MSEDCL.

MSEDCL submitted that a few States like Jharkhand, Andhra Pradesh, Chhattisgarh, etc. have taken the decision, either to exempt certain subsidized categories of consumers from the levy of FAC or to apportion the excess expenditure of power procurement on limited categories of consumers on proportionate basis.

Accordingly, MSEDCL proposed that BPL Domestic, LT and HT Agricultural consumers should be exempted from levy of FAC, and the FAC should be levied in proportion to the base tariff as may be applicable to the remaining categories of consumers.

Commission’s Ruling

As regards the proposal for removal of FAC cap, MSEDCL had filed a Petition in this regard in Case No. 102 of 2008, wherein MSEDCL sought removal of the FAC cap on account of expected under-recovery of FAC due to the presence of the cap on FAC recovery. In this Order, the Commission rejected MSEDCL’s request for removal of cap on FAC recovery, and ruled as under:

> *“41. On the issue of removal of FAC cap on the basis of projected FAC under-recovery for the period from November 2008 to March 2009, the Commission is of the view that it may not be appropriate to remove the ceiling on FAC recovery on the basis of projected data and permit MSEDCL to levy a substantially high FAC charge to consumers without prior approval of the Commission as that may lead to a huge tariff shock for the consumers. Since, the objective of having a cap on FAC recovery is to avoid automatic pass through of such expenses without*

prior approval and hence, avoid the causing of tariff shock to the consumers, the Commission is not inclined to amend or vary the present FAC cap which is 10% of the variable component of tariff.

However, taking into account the proviso to Regulation 82.6 which permits that any excess in the FAC charge over the above ceiling shall be carried forward by the Distribution Licensee and shall be recovered over such future period as may be directed by the Commission, the Commission will approve the FAC to be recovered by MSEDCL in excess of existing ceiling on recovery through FAC charge, i.e., 30.9 paise/kWh, after a detailed vetting of the actual FAC data on case-to-case basis.

… In this view of the matter, and taking into account similar directions issued by the Commission in similar petitions filed by MSEDCL, Regulation 82.6 of the Tariff Regulations is not being varied or amended. Accordingly, MSEDCL's present Petition in Case No. 102 of 2008 stands dismissed, with liberty to MSEDCL to submit the details of FAC Computations in the formats prescribed by the Commission for vetting for the period November 2008 to February 2009 based on actual data, if MSEDCL wishes to recover any excess in the FAC charge over the above ceiling of 10% of the variable component of tariff."

While determining the power purchase expenses for FY 2010-11, the latest prices have been considered by the Commission, and any variation in cost of fuel or power purchase will be recovered through the FAC mechanism. As regards MSEDCL's request for removal of the FAC cap, the Commission, having already ruled on this matter in Case No. 102 of 2008, does not find any merit in removing the cap on FAC recovery.

As regards the levy of proportionate FAC, MSEDCL had filed a Petition in this regard in Case No. 103 of 2008, wherein MSEDCL sought to exempt the above-mentioned categories from levy of FAC, and levy of FAC in proportion to the base tariff for the remaining consumer categories. In this Order, the Commission rejected MSEDCL's request, and ruled as under:

"31. Regulation 82 of the MERC (Terms and Conditions of Tariff) Regulations, 2005 clearly stipulate that FAC charge will be applicable for all consumers,

without any exception. Further, the Regulations provide for uniform charging of FAC for all consumers, as is evident from the formula specified for computation of FAC on per kWh basis, …

34. As regards MSEDCL's first prayer to exempt certain consumer categories from levy of FAC charge and to levy FAC charge in proportion to the respective base tariff of the remaining consumer categories, it should be noted that the Commission, in its Tariff Orders, has determined the tariff based on the tariff philosophy adopted in the respective Tariff Orders and the provisions of law. The tariffs and tariff categorisation have been determined so that the cross-subsidy is reduced without subjecting any consumer category to a tariff shock to the extent possible, and also to consolidate the movement towards uniform tariff categorisation throughout the State of Maharashtra.

35. The FAC charge is being levied on the consumer categories on account of the change in the cost of power generation and power procured due to change in fuel cost, which comprises almost 70 to 80% of the Distribution Licensee's Aggregate Revenue Requirement, and any expense pertaining to the regulated business of the Distribution Licensee has to be recovered from all consumers in some manner. Since no consumer is given electricity free of cost, if any category is exempted from levy of FAC charges, it would amount to that category not having to share the incremental cost of fuel for own generation and power purchase. Moreover, it should be appreciated that prior to the approval of the FAC Formula by the Commission, in case of the erstwhile MSEB, the agricultural consumers were exempted from paying FAC charges, and the Commission has ruled that all consumers should pay the FAC charges without exception, after a lot of deliberation on this issue. Therefore, it will not be appropriate to exempt certain categories while levying FAC charge.

36. As regards MSEDCL's second prayer to levy FAC charges in proportion to the base tariff of the respective consumer category and the contentions put forth by MSEDCL to justify this prayer, the Commission's views are as under. Contrary to the interpretation of MSEDCL that uniform FAC charge amounts to cross-subsidy being given by the normally subsidised consumers to the subsidising consumers, the levy of uniform FAC charge to all consumer categories actually *results in reducing the cross-subsidy to some extent, since the difference between the effective tariff of the subsidised and subsidising consumer categories is reduced vis-à-vis the average cost of supply. The reduction of cross-subsidy is in accordance with the provisions of the Electricity Act, 2003 and the Tariff Policy notified by the Government of India, which requires the cross-subsidy to be reduced progressively to + 20% of the average cost of supply by the year 2010-11. Also, since the tariff of the subsidised consumer categories, viz., agricultural and BPL category, is significantly lower than the average cost of supply, there is no question of these categories cross-subsidising the subsidising categories due to the levy of uniform FAC charge. The issue of prevalent cross-subsidy has to be resolved by reducing the cross-subsidy in the base tariffs, rather than by increasing the cross-subsidy further by levying FAC charges in proportion to the base tariff applicable to the respective consumer category, as proposed by MSEDCL.*

…

38. As regards the contention that proportionate FAC is in vogue in other States in the country, based on data submitted by MSEDCL, it is clear that the same has been adopted only in Jharkhand, since, in Chhattisgarh and Andhra Pradesh, the agricultural and BPL category are only exempted from paying FAC charges and there is no proportionate FAC charge. Thus, there is no clear regulatory precedence in the matter, even though the same would not be binding on MERC.

39. As regards MSEDCL's contention that the FAC charges should be levied in proportion to the respective base tariff since the already low collection efficiency would reduce further, the same is not substantiated by the data submitted by MSEDCL in this regard. MSEDCL's overall collection efficiency in FY 2007-08 has been around 96%, which is not too low. Moreover, if MSEDCL's rationale is to be accepted, then even the base tariff for the subsided categories should not be increased, which will result in further increase in cross-subsidy, which is against the principles specified in the EA 2003. Further, any inefficiency of MSEDCL in collecting its bills from its consumers cannot be a reason either for changing the present dispensation or charging the regularly paying consumer categories.

40. Accordingly, both the prayers of MSEDCL in this Petition are rejected."

The Commission has thus, already ruled in the matter. However, during the public hearing, there has been a persistent demand from the consumers all over the State in this regard. Hence, the Commission is inclined to accept this proposal. However, since this would involve amendment of Regulations, the Commission would initiate suo-motu the process of amending the MERC Tariff Regulations, within one month of the issue of this Order, during which, consultation will be done with other stakeholders, such as other distribution licensees in the State, and their consumers, consumer bodies, etc., as they will also be affected by the amendment of the Tariff Regulations.

(f) Rationalisation of Rate of Interest of Arrears

MSEDCL submitted that timely payment of dues is extremely important from the operational and financial point of view. MSEDCL submitted that in a regulated regime, all the recoveries as per the Commission's Tariff Orders are necessary to meet the obligations. Thus, penal interest for any non-payment has to act as a deterrent so as to ensure timely payments. MSEDCL proposed to modify the rate of interest of arrears to a flat rate of 12% per annum for agricultural consumers and to continue the existing rates of interest for all other consumers, since the interest rates applicable for the agricultural sector are generally on the lower side.

Commission's Ruling

No doubt, any concession to the farming community without affecting the regular revenue of the Licensee, should be welcome. However, in this case, it has to be kept in mind that in general, in all categories of consumers, including Agriculture, the smaller consumers are usually always regular paymasters, and therefore, the reduction in the rate of interest for delayed payment may be more beneficial to the bigger agricultural consumers, to whom, the higher interest rate has to act as a deterrent. The Commission is therefore, of the view that the proposed dispensation would not be beneficial to the large number of smaller and poorer agricultural consumers.

(g) New slab for consumption above 1000 units per month in residential category

MSEDCL has proposed to create a new consumption slab for monthly consumption above 1000 units under LT I residential category.

Commission's Ruling

The Commission accepts MSEDCL's proposal to create a new consumption slab for monthly consumption above 1000 units under LT I residential category, and the tariffs for this slab have been determined higher than that for the lower consumption slabs. However, the telescopic nature of the consumption slabs has been retained, and consumers falling in the highest slab will also benefit from the lower rates determined for the lower consumption slabs.

(h) Sub-category under HT II Commercial and LT II Commercial category

MSEDCL has proposed to create a sub-category under HT II Commercial and LT II Commercial categories as under:

- Two sub-categories are proposed under HT II commercial
  a. Government Owned and/or aided educational institutes and Hospitals,
  b. Other consumers like Malls, Multiplexes, and Private/Trust Hospitals, etc., and no tariff hike for sub-category (a).
- Two sub-categories are proposed in LT II (A) commercial 0-20 kW load
  a. All Education institutions, Hospitals, and Dispensaries.
  b. Other non-residential and commercial consumers and no tariff hike for sub-category (a)

Commission's Ruling

The Commission accepts MSEDCL's proposal to create a sub-category within LT II (A) Commercial with load from 0 to 20 kW, to cater to all educational institutions, hospitals and dispensaries, since MSEDCL has submitted the required data, and such a request has been made by the affected consumers also during the public hearings. It should be noted that this sub-category (LT II (A)(i)) will be applicable to all educational institutions, hospitals and dispensaries getting supply at LT voltages, as proposed by MSEDCL, and is not restricted to only Government owned or aided educational institutions, or charitable hospitals, etc., since, Section 62 (3) of the EA 2003 does not permit differentiation between consumers on the basis of ownership, as ruled by the Commission in earlier Orders.

The tariff for the two sub-categories under LT II (A), i.e., LT II (A) (i) - Educational Institutions, Hospitals and Dispensaries, and LT II (A) (ii) - Others, have been determined subsequently in this Section.

As regards MSEDCL's proposal to create a sub-category within HT II Commercial to cater to all Government Owned and/or aided educational institutes and Hospitals, the Commission is of the view that Section 62 (3) of the EA 2003 does not permit differentiation between consumers on the basis of ownership. Hence, the Commission has extended MSEDCL's proposal to all Educational Institutions and Hospitals under HT II Commercial category, by adopting the same approach as adopted for LT II (A) Commercial. Since, the Commission has already created two sub-categories for Express and Non-express feeders under HT II Commercial, the revised consumer categorisation under HT II Commercial, will be as under:

HT II Commercial

- (A) Express Feeders
  - (i) Educational Institutions and Hospitals
  - (ii) Others

- (B) Non-Express Feeders
  - (i) Educational Institutions and Hospitals
  - (ii) Others

(i) Franchisee through MoU Route

MSEDCL submitted that the State is presently experiencing an overall development wherein the real estate developers are investing in a large scale activity, which includes almost all categories of consumers. MSEDCL further submitted that these are generally subsidising category of consumers and it is in the interest of other consumers of Maharashtra that these consumers are retained with MSEDCL. MSEDCL submitted that MSEDCL may be permitted to appoint Distribution Franchisees through MOU route, who will be supplied energy at Bulk Supply Tariff, which shall be more than the average of the supply. MSEDCL submitted that it has also filed a detailed Petition in this regard (Case No. 62 of 2009) for consideration and approval of the Commission.

Commission's Ruling

The Commission has issued the Order dated May 24, 2010 on the Petition filed by MSEDCL seeking approval for appointment of Distribution Franchisees through the MoU route. As regards MSEDCL's request for determination of Bulk Supply Tariff for the Franchisee, the Commission ruled as under in the above-said Order:

> *"iii) MSEDCL has requested the Commission to approve the BST for supply to the Distribution Franchisee at single point for distribution to mixed loads within the Franchised area. MSEDCL has suggested that the BST be determined upfront by assuming a certain proportion of mixed loads, viz., residential, commercial, industrial, etc. However, this approach cannot be adopted as there are bound to be differences in consumption mix between one Distribution Franchisee and another, and obviously, the BST for each Franchisee will have to reflect its own consumption mix. Also, the Commission cannot determine BST for all the possible combinations of consumer mix. Further, since the freedom to appoint Franchisees would be available to all the distribution licensees in the State, there are likely to be several Distribution Franchisees, and therefore, it is impractical for the Commission to determine the BST for all the Distribution Franchisees. Further, the Commission holds that determination of BST is part of the process under Section 64 of the Electricity Act, 2003 for determination of Aggregate Revenue Requirement and tariff and hence, cannot be determined dehors the process under Section 64. Moreover, the Commission cannot undertake the exercise of BST determination on a case to case basis, and as when a distribution licensee decides to enter into a MoU with different entities at different points in time, and MSEDCL's proposal regarding BST determination is thus impractical on this ground."*

(j) Categorisation of construction power

MSEDCL submitted that power availed for any kind of construction activity should also be categorized under temporary connection. However, this will exclude small LT domestic consumers undertaking captive construction and having consumption up to 500 units per month.

Commission's Ruling

The Commission has already ruled on this matter in the previous APR Order dated August 17, 2009, as well as in its Clarificatory Order in Case No. 44 of 2008. The relevant extract of the Commission's APR Order dated August 17, 2009 is reproduced below:

> *"The Commission appreciates the concern expressed by the consumers engaged in construction activity that the nature of their connection is by no means 'temporary' and hence, it is inappropriate to classify construction activity under temporary. The Commission agrees with this rationale and rules that from hereon, temporary supply – HT or LT as applicable – will not include any construction activity, and will be limited to electricity used on temporary basis for any decorative lighting for exhibitions, circus, film shooting, marriages, etc., and the time period for consideration under temporary category will be one year. Further, all Construction activity, on infrastructure projects, buildings, hill station, etc., will be classified under 'Commercial Category' and be charged at HT Commercial or LT Commercial, as applicable. An illustrative Table, giving the applicability of tariff categories for various combinations of activities is given in the Table below.*
>
> *After the issue of the APR Order for FY 2007-08, wherein the category-wise tariffs for FY 2008-09 were determined, MSEDCL had filed a Clarificatory Petition in Case No. 44 of 2008. In its Clarificatory Petition, MSEDCL inter-alia sought clarification on the applicability of temporary tariff for residential consumers, who are renovating their existing premises. In this regard, the Commission clarified as under:*

> *"The Commission clarifies that the above stated applicability for LT VII – Temporary Connections was not intended to be applied to LT consumers who are renovating or undertaking minor construction activity at their existing premises. The Commission hence, clarifies that any LT consumer, having consumption upto 500 units per month, and who undertakes construction or renovation activity in his existing premises, does not require any separate temporary connection and this consumer should be billed at his existing tariff rate."*

In furtherance of the above clarification, certain situations have been envisaged, which have been described below, along with the tariff category to be applicable in each case:

Sl.	***Activity***	***Need for new connection for construction activity***	***Tariff category applicable****	
			Existing Connection	***New Connection***
1	*Residential consumer with consumption < 500 units, undertaking renovation/minor construction activity at existing premises*	*No*	*Residential*	*Not Applicable*
2	*Above, with consumption > 500 units*	*Yes*	*Residential*	*Commercial*
3	*Any kind of construction work – Infrastructure Projects, Buildings, Hill Station, etc.*	*No, since basic activity is construction*	*Commercial*	
4	*Temporary supply – less than 1 year*	*Not Applicable*	*Temporary*	

***Note**: * - In above illustrations, the tariff category would be HT or LT as applicable"*

In view of the above, the matter has been clarified.

(k) IT & ITES to be classified as Commercial

MSEDCL submitted that as per Tariff Order in Case No. 72 of 2007 dated June 20, 2008, LT- Non domestic/LT-II Tariff is applicable for power supply used for appliances like lights, Fans, Refrigerators, Heaters, Small Cookers, Radios, TV Sets, Battery Charger Equipment, X-ray machines, Small Motors up to 1HP attached to appliances and Water Pumps in following places, viz., Non-domestic, Commercial and Business premises including Shopping Mall and other locations as per Tariff Order. MSEDCL submitted that according to IT & ITES Policy, 2003, industrial tariff is applicable to the activities covered under IT and IT Enabled Services. However, usage of some activities is commercial in nature. Some of the activities, which are of such types are:

Computerized call centres:-

It is an integrated customer interaction platform, which drastically increases the efficiency of customer care with increased customer satisfaction associated with business growth and comes under commercial activities.

Geographical Information System mapping & services:-

Technically GIS includes mapping software and its applications with remote sensing, land surveying, Aerial Photography, Mathematics, Geography and terms that can be implemented with GIS Software to support decision making and to improve the operations and processes of business and comes under commercial service activities with skilled manpower requirement.

E-mail/ Internet fax provider:-

E-mail/Internet fax provider is Commercial activity. The services are available on Commercial basis. They are using system not only for Commercial purpose but also for the display of various advertisements of different products.

Computer system AMC holder:-

This is activity involved with Annual Maintenance Contract of Computers and is similar to services of vehicle garage engaged in the maintenance of vehicles/cars and is commercial activity as cost. Hence, such electricity consumers deserve to be charged at Commercial rate.

Multimedia development units (including, e.g. Animation and Special Effects, Videos and Photo Digitization):-

This is a commercial activity, which assists Companies in providing competitive marketing and selling business tools in the shape of 3D virtual tour, Multimedia interactive business profile, Multimedia Business Presentation and Multimedia Flash Presentation with designing services and ecommerce solutions.

IT Solution Providers / Implementers (such as and including Server/data banks, Application Service Providers, Internet /Web-based e-commerce service providers, Smart Card customization service providers, systems integration service providers) :-

IT Service providers unifies communication costs with new software. It provides various service organizations with reliable and secure information allowing institutes to deploy new services faster with improved customer service. These service providers also improve Companies' competitive position to enterprise applications and information on demand from shop floor to Executive Office. The services are available on Commercial Terms as specialized services and are commercial activities.

Cyber Café /Cyber Kiosk/Cyber Parlours and Video Conferencing Centres /Parlours:-

There exist cases of Cyber cafe, Cyber parlour that charge the customers on hourly basis and are purely commercial activity, but hold the registration of IT & IT enabled services and demand for industrial tariff.

Back Office Operations relating to computerized data:-

As per the Tariff Order, any office with intensive use of computers is commercial (being non-domestic). However, as per IT Policy, "Back Office operation relating to computerized data" and "other services provided with the extensive use of computers" is covered under IT services & IT enabled services and is eligible for industrial tariff. Actually, office operation is covered under commercial category.

BSNL activity & the mobile based communication (GPRS &CDMA) and its allied cell sites (Towers) are also included under IT units as per amendment dated April 8, 2005. Actually usage of phone and mobile at cost with interaction of consumers is a commercial activity but is covered under IT unit thereby enabling them to demand for industrial tariff.

MSEDCL submitted that it is essential to review the activities eligible for registration as IT services & IT enabled services in IT & ITES Policy, as these activities will be eligible for industrial tariff as against their commercial activity.

MSEDCL also submitted that the Mobile Towers are not declared under IT Policy to be Industries. Hence, MSEDCL has proposed that the Mobile towers be classified under commercial category.

Commission's Ruling

A similar issue was raised by MSEDCL in its previous APR Petition in Case No. 116 of 2008. The Commission has ruled on this matter in the previous APR Order dated August 17, 2009. The relevant extract of the Commission's APR Order dated August 17, 2009 is reproduced below:

> *"The Commission had consciously included IT and IT enabled Services (IT & ITeS) under industrial category (HT and LT as applicable) in the Tariff Order for the erstwhile MSEB in 2004. Since then, the IT & ITeS category continues to be charged under industrial tariffs. In the existing Tariff Schedule of MSEDCL as well as the approved Tariff Schedule for the distribution licensees in Mumbai issued in June 2009, the Commission has included IT & ITeS category under industrial, as reproduced below:*
>
> ***"5. LT V: LT- Industrial***
>
> *Applicability*

> *Applicable for industrial use at LT voltage, excluding Agricultural Pumping Loads. This Tariff shall also be applicable to IT Industry & IT enabled services (as defined in the Government of Maharashtra policy).”*
>
> ***“1. HT I : HT- Industry***
>
> *Applicability*
>
> *This category includes consumers taking 3-phase electricity supply at High Voltage for industrial purpose. This Tariff shall also be applicable to IT Industry & IT enabled services (as defined in the Government of Maharashtra policy).”*

> *In view of the above,* ***the Commission rules that IT & ITeS will be charged at industrial rates (HT and LT rates, as applicable),*** *without getting into the details of whether mobile towers and commercial broadcasting towers and all other similar activities are covered under the Government of Maharashtra Policy on IT & ITeS."*

In case MSEDCL desires to modify the eligibility and applicability of the IT & ITES Policy itself, then MSEDCL may approach the appropriate forum for the necessary relief.

5.4 Commission’s Tariff Philosophy

In this Order, the Commission has reduced the cross-subsidy prevailing between consumer categories, over that prevailing in the previous year.

As discussed earlier in this Section of this Order, the Commission has determined the total revenue requirement to be recovered through the tariff of FY 2010-11 as Rs. 30901 Crore after considering the revenue gap/(surplus) of FY 2008-09 and FY 2009-10 after final truing up and provisional truing up, respectively, which indicates that there is a need to increase the tariffs by around 3.03%.

The Commission has determined the tariffs in line with the tariff philosophy adopted by it in the past, and the provisions of law. The tariffs and tariff categorisation have been determined so that the cross-subsidy is reduced without subjecting any consumer category to a tariff shock.

Rationalisation of Tariff Categories

As enunciated by the Commission in the previous APR Orders, the Commission is of the view that it is not feasible to have uniform tariffs across different licensees, due to inherent differences, such as revenue requirement, consumer mix, consumption mix, LT:HT ratio, etc. It is also, not appropriate to compare category-wise tariffs across different licensees for the same reasons. However, in the previous APR Orders, the Commission had made significant progress in its efforts to rationalise and make uniform the tariff categorisation and applicability of tariffs for licensees in the State. The differences exist because of historical reasons and differences in management policies and approach across licensees. There will of course, be some differences, on account of certain consumer categories being present only in certain licence areas, such as agricultural category, power looms, etc., which will exist only in certain licence areas.

As enunciated in earlier Tariff Orders, while undertaking the rationalisation of tariff categories, the Commission has borne in mind the provisions of Section 62(3) of the Electricity Act, 2003, which stipulates as under:

> *"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."*

It should be noted that it is not possible to apply all the above specified criteria at the same time, for designing the tariff categories; else, with many permutations and combinations, there will be too many categories. Perhaps, that is also not the intention behind the provision, which merely enables the Regulators to work within the criteria.

Thus, it will be seen from the elucidation given below, as to how different criteria have been used to categorise different types of consumers:

- The 'load factor' and 'power factor' criteria have been used to provide rebates and disincentives, such as load factor incentive for load factor above certain specified levels, and power factor rebates and disincentives are provided to consumers who are able to maintain their power factor above specified levels.
- The consumer categories are broadly classified under High Tension (HT) and Low Tension (LT) categories, in accordance with the 'voltage' criteria under Section 62(3) reproduced above.
- The 'time of supply' criteria has been used to specify time of day (ToD) tariffs, so that the consumers are incentivised to shift their consumption to off-peak periods and thus, reduce the burden on the system during peak hours.
- The 'nature' of supply criteria has been used to specify differential tariff for continuous (non-interruptible) and non-continuous supply (interruptible)
- The criteria of 'purpose' of supply has been used extensively to differentiate between consumer categories, with categories such as residential, non-residential/commercial purposes, industrial purpose, agricultural purpose, street lighting purpose, etc.

In this context, quite a few consumers have been representing before the Commission during the Public Hearings, stating that they are not undertaking any 'commercial' activity or activities for making 'profit' within their premises, and hence, they should not be classified under the 'commercial' category. It is clarified that the 'commercial' category actually refers to all 'non-residential, non-industrial' purpose, or which has not been classified under any other specific category. For instance, all office establishments (whether Government or private), hospitals, educational institutions, airports, bus-stands, multiplexes, shopping malls, small and big stores, automobile showrooms, etc., are all covered under this categorisation, since they cannot be termed as residential or industrial. In order to bring clarity in this regard, the Commission had renamed this category as 'non-residential or commercial' in the previous APR Order.

As regards the submission by different consumer for creation of new categories is protect their own interest, in the past, it has been experienced that when the Commission created some new categories, the consumers went in appeal against the Commission's decision stating that such creation was neither proposed by the Utility nor were public or the concerned consumer was not put to notice of the same and hence it was set aside for reconsideration of the Commission by the concerned appellate authorities. Hence, in case the distribution licensees feel the justification and necessity for the creation of a new category, then they should submit the necessary consumer and consumption data and also ensure that the categorisation is in accordance with the criteria for differentiation provided under Section 62(3) of the EA 2003, for the Commission's consideration.

A similar impression is conveyed as regards the 'Industry' categorisation, with the Commission receiving several representations during and after the Public Hearings, from the hotel industry, leisure and travel industry, etc., stating that they have also been classified as 'industry' for the purpose of taxation and/or other benefits being extended by the Central Government or State Government, and hence, they should also be classified as 'industry' for the purpose of tariff determination. In this regards, it is clarified that classification under Industry for tax purposes and other purposes by the Central or State Government shall apply to matters within their jurisdiction and have no bearing on the tariffs determined by the Commission under the EA 2003, and the import of the categorisation under Industry under other specific laws cannot be applied to seek relief under other statutes. Broadly, the categorisation of 'Industry' is applicable to such activities, which entail 'manufacture'.

While appreciating the anxiety of different classes of consumers to reduce their payments on account of use of electricity, the reasonable costs incurred by the Utilities have to be met, and irrespective of the number of consumer categories or the sub-classification considered in accordance with the provisions of Section 62(3) of the EA 2003, the cross-subsidies have to be reduced gradually and the tariff differential between categories cannot be very significant in the long-run.

Further, it is clarified that the consumer categorisation should reflect the main purpose of the consumer premises. For instance, within a Factory, there could be canteens, recreation rooms for staff, gymnasium, time office, creche for employees' children, dormitory for workers, guest houses for visiting officers, etc., which are related to an incidental to the main purpose of the factory premises, and are intended for use by the staff/workers employed within the factory premises, and are not offered on commercial payment basis to people not employed within the factory premises. The factory cannot function in the absence of such ancillary activities. In such cases, the categorisation of such consumers should be 'Industrial' and the distribution licensee should not install sub-meters or separate meters for such ancillary and incidental activities, and charge them at commercial or any other rate, as has been done in some cases. On the other hand, if there are full-fledged employee quarters spread across one or more buildings, wherein the employees employed in the factory are given accommodation, then the supply to such premises should be metered separately through a sub-meter, and such premises should be charged at appropriate HT residential or LT residential tariffs, depending on the level of metering. It should be noted that all previous clarifications given by the Commission through its various Orders continue to be applicable, unless they are specifically contrary to anything that has been stated in this Order, wherein the clarifications given in this Order shall prevail.

Individual residential consumers taking supply at HT voltage (large bungalows) will be charged at LT residential rates, since there is no HT residential tariff category. Further, ‘HT VI Group Housing Society’ tariff is also applicable for such Housing Colonies of industrial consumers or educational institutions, taking supply at HT with separate sub-meter, irrespective of whether metering is at HT side or LT side of the transformer so long as the supply is at HT voltage.

Similarly, for commercial load of industrial consumers or educational institutions taking supply at HT voltage with separate sub-meter, the HT II Commercial category tariff will be applicable, irrespective of whether metering is at HT side or LT side of the transformer. The HT VI Commercial category tariff will not be applicable in such cases, since the same is intended to be only an interim solution, since all such commercial category consumers taking supply at single point have to be converted either to franchisee or individual connections, in accordance with the detailed rationale given by the Commission in previous Tariff Orders.

Electricity used for the purpose of Sewage Treatment will fall under Public Water Works since these are offered by the same entity, viz., Municipal Corporation or Council, etc.

As regards agricultural tariffs, the Commission is of the view that the tariffs have to be increased gradually, in order to reduce the cross-subsidy; however, the tariffs have to be linked to the quality and reliability of supply being given to the agricultural consumers. Under such circumstances, the Commission has increased the agricultural tariffs, though, at a rate lower than that proposed by MSEDCL. Further, the Commission has created a new sub-category within the existing LT Agricultural sub-categories, and the tariff for consumers having agricultural pumpsets with 0-5 HP has been retained at the existing levels, while the tariff of the remaining agricultural consumers has been slightly increased.

The applicability of tariffs for different consumer categories has been stipulated in the approved Tariff Schedule, which is annexed as a part of this Order (**Annexure II**).

<u>Rationalisation of Tariff Components</u>

The Commission has continued to determine the tariffs such that there is an in-built incentive to consumers to reduce their consumption, as the impact on the bills is designed to increase as the consumption increases, on account of the higher telescopic tariffs applicable for the higher consumption slabs, while at the same time ensuring that even the consumers falling in the higher consumption slabs are charged lower for the consumption corresponding to the lower consumption slab. Further, as stated earlier, the Commission has accepted MSEDCL's proposal to introduce a new consumption slab for consumption above 1000 units per month, under LT I residential category.

The applicability of the BPL category tariffs has been retained same as that specified in the previous APR Order, read with any clarification thereon. The eligibility criteria has been retained at an annual limit of 360 units. The applicability of BPL category will have to be assessed at the end of each financial year. In case any BPL consumer has consumed more than 360 units in the previous financial year, then the consumer will henceforth, be considered under the LT-I residential category. Once a consumer is classified under the LT-I category, then he cannot be classified under BPL category.

The Commission has retained the fixed charges/demand charges applicable for different consumer categories at the previous year's level.
As regards the tariff applicable to MPECS, the Commission has elaborated its view point in the previous APR Orders for MSEDCL. There has been no change in MPECS's situation or consumer mix. Also, the issue of tariff applicable for MPECS is currently pending before the Honourable Supreme Court. Hence, the Commission has retained the tariffs applicable for MPECS at the same level.

Based on the tariffs determined by the Commission for different consumer categories:

- There is no increase in tariff for around 1.2 crore consumers in the residential category, consuming less than 300 units per month
- There is no increase in tariff for the LT PWW category
- There is no increase in tariff for the newly created sub-category within LT agricultural category with load 0-5 HP
- There is no change in tariff for Temporary Religious category
- There is no change in tariff for the Group Housing Societies taking supply at single point
- There is reduction in tariff for Educational Institutions and Hospitals as compared to existing tariffs.

The Time of Day (ToD) tariffs will be applicable compulsorily to HT I, HT II, and HT IV categories among HT categories, and LT II (B), LT II (C), LT III, and LT V (B) category consumers having TOD meters, as well as optionally available to LT – II (A) and LT V (A) category consumers, who have TOD meters. The TOD tariffs have been retained at the existing levels as under:) 1800 to 220 hours.
Additional peak hour tariff will be payable for

- Five time slots, viz., (a) 2200 to 0600 hours, (b) 0600 to 0900 hours, (c) 0900 to 1200 hours, (d) 1200 to 1800 hours, and (e
- consumption during the peak hours in the State, viz., 0900 to 1200 hours – morning peak, and 1800 to 2200 hours – evening peak, in the following manner:

- 0900 to 1200 hours : Additional Rs. 0.80 /kWh
- 1800 to 2200 hours : Additional Rs. 1.10 /kWh

- For consumption during night off-peak hours, viz., 2200 to 0600 hours, a rebate of Rs. 0.85 /kWh will be available
- Neither additional tariff nor rebate will be applicable for consumption during 0600 to 0900 hours and 1200 to 1800 hours

Additional demand charges of Rs 20 per kVA per month would be chargeable for the stand by component, for CPPs, only if the actual demand recorded exceeds the Contract Demand.

The **Billing Demand definition** has been retained at the existing levels, i.e.,

Monthly Billing Demand will be the higher of the following:

(a) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;

(b) 75% of the highest billing demand/Contract Demand, whichever is lower, recorded during the preceding eleven months;

(c) 50% of the Contract Demand.

Average Cost of Supply, Tariffs proposed by MSEDCL, and tariffs approved by the Commission

The computation of average cost of supply (CoS) is given below:

Table: Average Cost of Supply for FY 2010-11

Sl.	**Particulars**	**MSEDCL**	**Approved by the Commission**
1	Total Revenue Requirement (Rs. Crore)	34106	30901
2	Total Sales (MU)	69963	70480
3	**Average Cost of Supply (Rs/kWh)**	**4.87**	**4.38**

The comparison of the existing tariffs, tariffs proposed by MSEDCL and tariffs approved by the Commission as well as the percentage increase for each consumer category, are given in the Table below:

Category	Average Cost of Supply	Existing Tariff	Average Billing Rate (Rs/kWh)			
			Tariff Proposed by MSEDCL		Revised Tariff	
			ABR	% Increase	ABR	% Increase
LT Category						
LT I-Domestic	4.38	3.61	4.12	14.03%	3.67	1.74%
LT-II Non Domestic		6.37	7.55	18.54%	6.61	3.79%
LT III-Public Water Works		2.18	2.39	9.86%	2.18	0.15%
LT IV-Agriculture		1.87	2.15	15.20%	1.98	5.97%
LT V Industrial		4.75	5.30	11.66%	5.17	8.97%
LT VI- Street Lighting		3.32	3.63	9.28%	3.50	5.52%
LT VIII Temporary Others		11.31	13.26	17.22%	11.69	3.39%
HT Category						
HT-I Industry (Express Feeder)	4.38	5.51	6.30	14.21%	5.62	1.87%
HT-I Industry (Non-Express Feeder)		5.15	6.05	17.45%	5.23	1.62%
HT-I Seasonal Industry		6.84	7.66	11.94%	6.92	1.22%
HT II- Commercial		7.91	10.20	28.94%	8.14	2.92%
HT-III Railways		5.47	5.95	8.84%	5.80	6.10%
HT-IV-Public Water Works		3.90	4.48	14.88%	4.02	3.06%
HT-V- Agriculture		2.30	2.67	15.74%	2.39	3.62%
HT-VI-Bulk Supply-Residential		4.19	5.91	41.14%	4.19	0.08%
HT-VI-Bulk Supply-Commercial		6.25	6.81	8.93%	6.80	8.80%
HT-VII-MPECS		2.84	3.03	6.55%	2.84	0.00%

The prevailing cross-subsidy and the reduction in cross-subsidy considered by the Commission are given in the Table below:

Categories	Average Cost of Supply (Rs./kWh)	Average Billing Rate	Ratio of Average Billing Rate to Average Cost of Supply		
			APR Order for FY 09	Existing Tariff to Current ACOS	Revised Tariff to Current ACOS
HT Category					
HT-I Industry (Express Feeder)	4.38	5.62	124%	126%	128%
HT-I Industry (Non-Express Feeder)		5.23	116%	117%	119%
HT-I Seasonal Industry		6.92	147%	156%	158%
HT II- Commercial		8.14	179%	180%	186%
HT-III Railways		5.80	123%	125%	132%
HT IV- Public Water Works (PWW)		4.02	86%	89%	92%
HTV - Agricultural		2.39	49%	53%	54%
HT-VI-Bulk Supply-Residential		4.19	91%	96%	96%
HT-VI-Bulk Supply-Commercial		6.80	142%	143%	155%
HT-VII-MPECS		2.85	63%	65%	65%
LT Category					
LT I-Domestic	4.38	3.67	96%	82%	84%
LT-II Non Domestic		6.61	148%	145%	151%
LT III-Public Water Works		2.18	52%	50%	50%
LT IV-Agriculture		1.98	42%	43%	45%
LT V Industrial		5.17	100%	108%	118%
LT VI- Street Lighting		3.50	74%	76%	80%
LT VIII Temporary Others		11.69	256%	258%	267%

In the above Tables,

(a) 'Existing Tariff' refers to the tariff approved by the Commission in the APR Order dated August 17, 2009

(b) 'Revised Tariff' refers to the tariff approved by the Commission in the present APR Order

(c) Ratio of Average Billing Rate (ABR) to Average Cost of Supply (ACOS)

i) ‘APR Order for FY09’ refers to the ratio of ABR to ACOS as envisaged in the APR Order for FY 2008-09

ii) ‘Existing Tariff to current ACOS’ refers to the ratio of ABR approved in the APR Order for FY 2008-09 to the ACOS approved in the present APR Order, i.e., Rs. 4.38 per kWh

iii) ‘Revised Tariff to current ACOS’ refers to the ratio of ABR approved in this APR Order for FY 2009-10 to the ACOS approved in the present APR Order, i.e., Rs. 4.38 per kWh

While the tariffs have been determined such that the revenue gap considered for the year is met entirely through the revision in tariffs, it is possible that the actual revenue earned by MSEDCL may be higher or lower than that considered by the Commission, on account of the re-categorisation and creation of new consumer categories/sub-categories. The revenue shortfall/surplus if any, will be trued up at the time of provisional truing up for FY 2009-10.

RLC Refund Methodology

The Commission has considered RLC refund of Rs. 500 crore in FY 2010-11. As regards the methodology for the refund of RLC, the Commission has already elaborated the same in the APR Order for MSEDCL in Case No. 72 of 2007. The methodology of RLC refund is stated below:

The refund of RLC would be undertaken on a one-to-one basis, rather than to the contributing category as a whole, in the following manner.

a. The refund of RLC will be in absolute terms, viz., Rs/month, and not in terms of paise/kWh of consumption, so that the consumers are eligible for a fixed amount every month, irrespective of their consumption, minimising the need for undertaking detailed truing up of this refund amount. It would also ensure that no injustice is done to consumers who have shifted/are planning to shift to captive consumption subsequently.

Since Rs. 500 crore is to be refunded in FY 2010-11 out of the total RLC collection of Rs. 3227 crore, the refund in FY 2010-11 will be in the same proportion of the contribution by that consumer. The percentage of refund works out to 16%. This will also ensure that consumers get the refund in the exact same proportion as their consumption, and consumers who have paid RLC for a lower duration, would get lower refund on a monthly basis, such that all the consumers get their complete refund over the same period of time.

5.5 Revised Tariffs with effect from September 1, 2010

Summary of LT Tariffs effective from September 1, 2010

Sl.	Consumer category & Consumption Slab	Tariffs	
		Fixed/ Demand Charge	Energy Charge (Rs/kWh)
1	**LT I - Residential (BPL)**	Rs. 3 per month	0.78
	LT I – Residential		
	0-100 units	Single Phase: Rs. 30 per month Three Phase: Rs. 100 per month$^{\$\$}$	2.47
	101-300 units		4.37
	301 - 500 units		6.25
	501 - 1000 units		7.25
	Above 1000 Units (balance units)		7.50
2	**LT II - LT Non-residential or Commercial**		
(A)	0-20 kW		
(i)	<u>Educational institutions, hospitals and dispensaries</u>		
	0 – 200 units per month	Rs. 150 per month	4.30
	Above 200 units per month (only balance consumption)	Rs. 150 per month	6.00
(ii)	<u>Others</u>		
	0 – 200 units per month	Rs. 150 per month	4.50
	Above 200 units per month (only balance consumption)	Rs. 150 per month	6.45

Sl.	Consumer category & Consumption Slab	Tariffs	
		Fixed/ Demand Charge	Energy Charge (Rs/kWh)
(B)	> 20 kW and ≤ 50 kW	Rs. 150 per kVA per month	6.50
(C)	> 50 kW		8.40
3	**LT III – Public Water Works & Sewage Treatment Plants**		
(A)	0-20 kW	Rs. 40 per kVA per month	1.72
(B)	> 20 kW and ≤ 40 kW	Rs. 50 per kVA per month	2.22
(C)	> 40 kW and < 50 kW	Rs. 70 per kVA per month	3.02
4	**LT IV - Agriculture**		
4.1	Un-metered Tariff		
(A)	Category 1 Zones*		
(i)	0 - 5 HP	Rs. 276 per kW per month- (Rs 206 per HP per month)	
(ii)	Above 5 HP	Rs. 315 per kW per month- (Rs 235 per HP per month)	
(B)	Category 2 Zones#		
(i)	0 - 5 HP	Rs 237 per kW per month- (Rs. 176 per HP per month)	
(ii)	Above 5 HP	Rs 268 per kW per month- (Rs. 200 per HP per month)	
4.2	Metered Tariff (incl Poultry Farms)	Rs. 20 per kW per month (Rs. 15 per HP per month)	1.54
5	**LT V -** LT Industry		
(A)	0-20 kW	Rs. 150 per connection per month	3.90
(B)	Above 20 kW	Rs. 100 per kVA per month	5.40
6	**LT VI – Streetlights**		
(A)	Grampanchayat, A, B, & C Class Municipal Council	Rs. 30 per kW per month	3.10
(B)	Municipal Corporation Areas		3.70
7	**LT VII – Temporary Supply**		

Sl.	Consumer category & Consumption Slab	Tariffs	
		Fixed/ Demand Charge	Energy Charge (Rs/kWh)
(A)	TSR – Temporary Supply Religious	Rs 200 per connection per month	2.52
(B)	TSO – Temporary Supply Others	Rs 250 per connection per month	11.50
8	**LT VIII – Advertisement & Hoardings**	Rs 400 per connection per month	16.00
9	**LT IX – Crematoriums and Burial Grounds**	Rs 200 per connection per month	2.52
	TOD Tariffs (in addition to above base tariffs) – compulsory for LT II (B) and (C), LT III, LT V (B), and optional for LT II (A) and LT V (A) category		
	0600 hours to 0900 hours		0.00
	0900 hours to 1200 hours		0.80
	1200 hours to 1800 hours		0.00
	1800 hours to 2200 hours		1.10
	2200 hours to 0600 hours		-0.85

***Category 1 Zones (with consumption norm above 1318 hours/HP/year)**					
1	Bhandup (U)	2	Pune	3	Nashik

#Category 2 Zones (with consumption norm below 1318 hours/HP/year)					
1	Amravati	2	Aurangabad	3	Kalyan
4	Konkan	5	Kolhapur	6	Latur
7	Nagpur(U)	8	Nagpur		

Notes:

1. Fuel Adjustment Cost (FAC) will be applicable to all consumers and will be charged over the above tariffs, on the basis of the FAC formula prescribed by the Commission, and computed on a monthly basis.
2. $$: Additional Fixed Charge of Rs. 100 per 10 kW load or part thereof above 10 kW load shall be payable.

3. #: Street lightings having 'automatic timers' for switching 'on/off' would be levied Demand Charges on the lower of the following:
    (A. 50% of the Contract Demand
    (B. Actual Recorded Demand
4. Billing Demand for all LT categories where MD based tariff is applicable:

    Monthly Billing Demand will be the higher of the following:
    (A. 65% of the Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
    (B. 40% of the Contract Demand

Summary of HT Tariffs effective from September 1, 2010

Sl.	Consumer category & Consumption Slab	Tariffs	
		Fixed/ Demand Charge	Energy Charge (Rs/kWh)
1	**HT I – Industry**		
(A)	Express Feeders	Rs 150 per kVA per month	5.27
(B)	Non-express Feeders		4.80
(C)	Seasonal Industry		5.90
2	**HT II – Commercial**		
(A)	Express Feeders		
(1)	Educational Institutions & Hospitals	Rs 150 per kVA per month	7.65
(2)	Others		7.95
(B)	Non-express Feeders		
(1)	Educational Institutions & Hospitals	Rs 150 per kVA per month	7.15
(2)	Others		7.45
3	**HT III – Railways**		5.80

Sl.	Consumer category & Consumption Slab	Tariffs	
		Fixed/ Demand Charge	Energy Charge (Rs/kWh)
4	**HT IV – Public Water Works & Sewage Treatment Plants**		
(A)	Express Feeders	Rs 150 per kVA per month	3.75
(B)	Non-express Feeders		3.60
5	**HT V - Agriculture**	Rs. 25 per kVA per month	2.15
6	**HT VI**		
(A)	Group Housing Society	Rs 125 per kVA per month	3.72
(B)	Commercial Complex		6.30
7	**HT VII – Mula Pravara Electric Co-op Society**	Rs 100 per kVA per month	2.62
8	**HT VIII – Temporary Supply**	Rs 200 per connection per month	10.12
	TOD Tariffs (in addition to above base tariffs) for HT I, HT II and HT IV categories		
	0600 hours to 0900 hours		0.00
	0900 hours to 1200 hours		0.80
	1200 hours to 1800 hours		0.00
	1800 hours to 2200 hours		1.10
	2200 hours to 0600 hours		-0.85

Notes:

1. HT V category includes HT Lift Irrigation Schemes irrespective of ownership.
2. FAC will be determined every month based on the FAC Formula approved by the Commission
3. <u>Billing Demand for all HT categories (except HT II seasonal category)</u>

   Monthly Billing Demand will be the higher of the following:

   i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours

   ii. 75% of the highest billing demand recorded during preceding eleven months

   iii. 50% of the Contract Demand.
4. <u>Billing Demand for HT Seasonal Category (HT II)</u>

<u>During Declared Season</u> Monthly Billing Demand will be the higher of the following:

i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
ii. 75% of the Contract Demand
iii. 50 kVA.

<u>During Declared Off-season</u>
Monthly Billing Demand will be the following:
i) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours

5. HT Industrial consumers having captive generation facilities synchronized with the grid will pay additional demand charges of Rs. 20 per kVA per month only for the standby contract demand component.

The detailed computation of category-wise revenue with revised tariffs has been given as **Annexure I** to this Order.

The approved Tariff Schedule has been given as **Annexure II** to this Order

Pass through of variation in fuel cost of power purchase

The existing FAC has been equated to zero, on account of the adoption of the recent variable costs of power purchase for projection of the power purchase expenses. In case of any variation in the fuel cost (variable charge) of power purchase, MSEDCL will be able to pass on the corresponding increase to the consumers through the existing FAC mechanism, subject to the stipulated ceiling of 10% of average energy charges, which works out to 37.75 paise per kWh. The FAC will be charged on a monthly basis.

Vetting of FAC levied on consumers

The levy of Fuel Adjustment Cost (FAC) charge for different consumers and the under-recovery/over-recovery of the corresponding costs will be vetted by the Commission bi-monthly on a post-facto basis, based on submissions made by MSEDCL. However, for the first month after the issue of the Order, MSEDCL should obtain the Commission's prior approval for levy of FAC, to ensure that the FAC is being levied correctly. Thereafter, MSEDCL should submit the FAC computations and details of under-recovery/over-recovery of fuel cost variations on a bi-monthly basis, as applicable.

5.6 Wheeling Charges and Loss Compensation

In the APR Order for MSEDCL for FY 2008-09, the Commission approved wheeling charges and wheeling losses at HT and LT level for FY 2009-10 as under:

Item Description	**Approved for FY 2009-10**	
	Wheeling Charge (Rs/kWh)	**Wheeling Loss (%)**
33 kV	0.05	6%
22 kV / 11 kV	0.25	9%
LT level	0.43	14%

In the MYT Order for MSEDCL, the Commission observed that separate accounting of network related costs and supply related costs is essential for un-bundling of cost and tariff components and is a pre-requisite for appropriate determination of wheeling charges. Also, network costs needs to be further segregated in terms of voltage level (33 kV, 22 kV/11 kV, and LT). The Commission had directed MSEDCL to submit voltage-wise segregated wire cost component of ARR during Annual Performance Review. The Commission had also directed MSEDCL to maintain the accounts for expenses incurred on wires business and supply business separately, and submit the same in its previous APR Orders.

However, MSEDCL has not maintained network related and supply related costs separately. MSEDCL, under its APR Petition, submitted that it has applied the same ratio of Network and Supply cost segregation as approved by the Commission in its MYT Order dated May 18, 2007 to arrive at Network related costs. MSEDCL further submitted that MSEDCL does not maintain audited accounts for voltage-wise assets. However, based on engineering estimate of its assets, MSEDCL has arrived at the voltage-wise segregation of GFA and costs. The value of assets considered here is as per the opening gross block at the beginning of the year. Opening GFA of MSEDCL for FY 2010-11 has been segregated in terms of various voltage levels as under: 33 kV – 14%, 22 kV/11 kV – 56%, and LT level – 30%.

Based on contract demand at various voltage levels, MSEDCL projected the wheeling charges and wheeling losses as under:

Item Description	**MSEDCL Projection for FY 2010-11**	
	Wheeling Charge (Rs/kWh)	**Wheeling Loss (%)**
33 kV	1.00	6%
22 kV / 11 kV	1.34	9%
LT level	0.57	20.98%

Further MSEDCL proposed that wheeling losses determined by the Commission in its order dated August 17, 2009 for drawal at 33kVand 22/11 kV shall be applicable for FY 2010-11. MSEDCL also submitted that consumers seeking open access at LT level shall be levied with opening distribution loss of FY 2010-11. Hence, MSEDCL proposed that wheeling loss applicable for open access transactions entailing drawal at LT level is 20.98%.

In the absence of accounting information for wire related costs, the Commission has considered allocation of various cost components of Aggregate Revenue Requirement (ARR) between network related costs and supply related costs, in line with the principles outlined under MYT Order for MSEDCL. Accordingly, approved network related ARR of MSEDCL for FY 2009-10 amounts to Rs 1845 Crore. The Commission directs

MSEDCL to maintain the accounts for expenses incurred on wires business and supply business separately, and submit the same during next tariff determination process.

The Commission has determined the wheeling charges for 33 kV, 22 kV/11 kV and LT level, based on the allocation of asset base and considering sales at respective voltage levels. The ARR has been segregated between wheeling business and retail supply business based on the submissions made by MSEDCL. Consumers connected directly to the transmission network would not be required to pay the wheeling charges.

The total ARR of the Wires business as computed above has been apportioned to various voltage levels (i.e., 33 kV, 22kV/11 kV and LT) in the ratio of sales at respective voltage levels, and the wire costs at higher voltage levels has been further apportioned to lower voltage levels, since the HT system is also being used for supply to the LT consumers. Thus, the wheeling charge applicable to consumers connected at the various voltage levels on the distribution network during FY 2010-11 is summarized under following table. The Commission has stipulated wheeling charges for use of wire network of MSEDCL for FY 2010-11 in terms of Rs/kWh at various voltage levels as summarized below. Such wheeling charges shall come into effect from date of issuance of this Tariff Order. The per unit wheeling charge (Rs/kWh) at each voltage level has been derived as the ratio of apportioned network wheeling cost at each voltage level and energy units handled at respective voltage level.

In addition, wheeling loss in kind shall also be applicable for wheeling transactions. MSEDCL has not submitted the voltage-level loss data, despite being queried by the Commission on several occasions. In the absence of this data, the Commission has used its best judgement to assess the voltage level losses. It is also logical that the open access consumers have to bear only the technical losses in the system, and should not be asked to bear any part of the commercial losses.

The technical losses at higher voltages will be lower than the technical losses at lower voltages. The Commission has considered the technical losses at 33 kV as 6% and the technical losses at 22 kV/11 kV at 9%, as projected by MSEDCL. However, as regards technical losses at LT level, the Commission does not agree with MSEDCL proposal to apply overall distribution loss of 20.98% (i.e., opening distribution loss at FY 2010-11 as projected by MSEDCL) which includes commercial loss component as well. The Commission hence, rules that the wheeling loss applicable is 6% for open access transactions entailing drawal at 33 kV level, 9% for drawal at 22 kV/11 kV level, and 14% for drawal at LT level equivalent to estimated technical loss at LT level, considering that the overall distribution loss allowed for FY 2010-11 is 17.2%.

Accordingly, approved Wheeling Charges and Wheeling Loss at HT and LT level for FY 2010-11is summarised in the following Table:

Item Description	**Approved for FY 2010-11**	
	Wheeling Charge (Rs/kWh)	**Wheeling Loss (%)**
33 kV	0.04	6%
22 kV / 11 kV	0.21	9%
LT level	0.36	14%

In addition, the Commission reiterates that all other conditions and principles as regards Applicability of Wheeling Charges and Wheeling Losses (Ref. Cl. 6.6) and Cross-subsidy surcharge (Ref. Cl. 6.7) for open access transactions as outlined under MYT Order (Case No. 65 of 2006) and further elaborated vide Commission's Order dated November 20, 2007 (Case No. 33 of 2007) shall continue to be applicable under this Order for Wheeling Charges as approved for FY 2010-11.

5.7 Cross-subsidy Surcharge

The cross-subsidy surcharge for eligible open access consumers will continue to be zero, in continuation of the Commission's decision in this regard in the previous Tariff Order. Further, in this regard, MSEDCL has filed a separate Petition on August 25, 2010 in Case No. 43 of 2010 in the matter of Determination of Cross Subsidy Surcharge and for determination of Additional Surcharge on the charges of wheeling to be recovered from the consumers and/or persons, who have been granted open access, which is under Regulatory process.

5.8 Incentives and Disincentives

Power Factor Incentive (Applicable for HT I, HT II, HT IV, HT V and HT VI categories, as well as LT II (B), LT II (C), LT III, and LT V (B) categories)
Whenever the average power factor is more than 0.95, an incentive shall be given at the rate of the following percentages of the amount of the monthly bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Incentive
1	0.951 to 0.954	0.95	0%
2	0.955 to 0.964	0.96	1%
3	0.965 to 0.974	0.97	2%
4	0.975 to 0.984	0.98	3%
5	0.985 to 0.994	0.99	5%
6	0.995 to 1.000	1.00	7%

Note: PF to be measured/computed upto 3 decimals, after universal rounding off

Power Factor Penalty (Applicable for HT I, HT II, HT IV, HT V and HT VI categories, as well as LT II (B), LT II (C), LT III, and LT V (B) categories)
Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of the following percentages of the amount of the monthly bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Penalty
1	0.895 to 0.900	0.90	0%
2	0.885 to 0.894	0.89	2%
3	0.875 to 0.884	0.88	3%
4	0.865 to 0.874	0.87	4%

Sl.	Range of Power Factor	Power Factor Level	Penalty
5	0.855 to 0.864	0.86	5%
6	0.845 to 0.854	0.85	6%
7	0.835 to 0.844	0.84	7%
8	0.825 to 0.834	0.83	8%
9	0.815 to 0.824	0.82	9%
10	0.805 to 0.814	0.81	10%
...	...	...	...

Note: PF to be measured/computed upto 3 decimals, after universal rounding off

Prompt Payment Discount

A prompt payment discount of one percent on the monthly bill (excluding Taxes and Duties) shall be available to the consumers if the bills are paid within a period of 7 days from the date of issue of the bill, or within 5 days of the receipt of the bill, whichever is later.

Delayed Payment Charges (DPC)

In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of 2 percent on the total electricity bill (including Taxes and Duties) shall be levied on the bill amount. For the purpose of computation of time limit for payment of bills, “the day of presentation of bill” or “the date of the bill” or "the date of issue of the bill", etc. as the case may be, will not be excluded.

Rate of Interest on Arrears

The rate of interest chargeable on arrears will be as given below for payment of arrears-

Sr. No.	Delay in Payment (months)	Interest Rate p.a. (%)
1	Payment after due date upto 3 months (0 - 3)	12%
2	Payment made after 3 months and before 6 months (3 - 6)	15%
3	Payment made after 6 months (> 6)	18%

Load Factor Incentive

Consumers having load factor over 75% upto 85% will be entitled to a rebate of 0.75% on the energy charges for every percentage point increase in load factor from 75% to 85%. Consumers having a load factor over 85 % will be entitled to rebate of 1% on the energy charges for every percentage point increase in load factor from 85%. The total rebate under this head will be subject to a ceiling of 15% of the energy charges for that consumer. This incentive is limited to HT I and HT II categories only. Further, the load factor rebate will be available only if the consumer has no arrears with MSEDCL, and payment is made within seven days from the date of the bill. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by MSEDCL, and the same is being made as scheduled. MSEDCL has to take a commercial decision on the issue of how to determine the time frame for which the payments should have been made as scheduled, in order to be eligible for the Load Factor incentive.

The Load Factor has been defined below:

$$\text{Load Factor} = \frac{\text{Consumption during the month in MU}}{\text{Maximum Consumption Possible during the month in MU}}$$

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor x (Total no. of hrs during the month less planned load shedding hours*)

* - Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme.

In case the billing demand exceeds the contract demand in any particular month, then the load factor incentive will not be payable in that month. (The billing demand definition excludes the demand recorded during the non-peak hours i.e. 22:00 hrs to 06:00 hrs and therefore, even if the maximum demand exceeds the contract demand in that duration, load factor incentives would be applicable. However, the consumer would be subjected to the penal charges for exceeding the contract demand and has to pay the applicable penal charges).

5.9 APPLICABILITY OF ORDER

This Order for MSEDCL for FY 2010-11, shall come into force with effect from September 1, 2010.

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

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

(K. N. Khawarey)
Secretary, MERC

Annexure 1

Revenue from revised tariffs effective from September 1, 2010

		Components of tariff		Relevant sales & load/demand data		Full year revenue excluding external subsidy (Rs. Crore)				
Categories	**No of consumers**	**Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)**	**Energy Charge (paise/ kWh)**	**Annual Sales (MU)**	**Connected Load/ Contract Demand (HP/kVA)**	**Revenue from Fixed/ Demand Charge**	**Revenue from Energy Charge**	**Total**	**Average Billing Rate**	**% Tariff Increase**
HT Category										
HT I - Industries	9,899									
				25,024	6949260	**939**	**12658**	**13597**	**5.43**	**1.1%**
HT I-Cont (Express Feeders)	1,481	150	527	15581	3875533	541	8211		5.62	1.9%
HT I-Non Cont (Non Express Feeders)	7,886	150	480	9265	3073727	399	4447		5.23	1.6%
HT I - Seasonal Category	532	150	590	179	133204	**18**	**105**	**124**	**6.92**	1.2%
TOD Consumption										
2200 Hrs-0600 Hrs			-85	8258			**-702**			
0600 Hrs-0900Hrs & 1200 Hrs- 1800Hrs			0	9509			**0**			
0900 Hrs-1200 Hrs			80	3253			**260**			
1800 Hrs-2200 Hrs			110	4004			**440**	**-1**		
HT I Industrial				**25,024**	**7082465**	**957**	**12762**	**13720**	**5.48**	1.8%
HT II Commercial	2,587			**1619**	**899762**	**104**	**1214**	**1319**	**8.14**	2.9%
A) Express Feeder				***300***	***166456***	***19***	***233***	***253***	**8.43**	
1) Educational Institutions & Hospitals		150	765	162	89976	10	124			
2) Others		150	795	138	76480	9	109			
B) Non-express Feeder				***1320***	***733306***	***85***	***981***	***1066***	**8.08**	2.1%
1) Educational Institutions & Hospitals		150	715	81	44988	5	58			
2) Others		150	745	1239	688318	80	923			
HT III Railways	**49**	**0**	580	**1427**	**3,99,100**		**827**	**827**	**5.80**	6.1%
HT IV - Public Water Works (PWW)	729			**1190**	**266277**	**37**	**441**	**478**	**4.02**	3.1%
Express Feeders	293	150	375	854	173368	25	320		4.04	3.4%
Non-Express Feeders	436	150	360	335	92909	12	121		3.96	2.1%
TOD Consumption										
2200 Hrs-0600 Hrs			-85	393			**-33**			
0600 Hrs-0900Hrs & 1200 Hrs- 1800Hrs			0	452			**0**			
0900 Hrs-1200 Hrs			80	155			**12**			
1800 Hrs-2200 Hrs			110	190			**21**	**0**		
HTV - Agricultural	**1,074**	**25**	215	**496**	**391273**	**12**	**107**	**118**	**2.39**	3.6%
HT VI - Bulk Supply	451			**407**	**141269**	**21**	**152**	**173**	**4.25**	0.1%
Residential Complex	405	125	372	406	127920	19	151		4.19	0.1%
Commercial Complex	46	125	630	1	13349	2	1		6.80	8.8%
Mula Pravara Electric Co-op Society (MPECS)	**1**	**100**	262	**743**	**140000**	**17**	**195**	**211**	**2.85**	0.1%
TOTAL HT Category	**14,790**			**30905**		**1148**	**15698**	**16846**	**5.45**	2.1%

		Components of tariff		Relevant sales & load/demand data		Full year revenue excluding external subsidy (Rs. Crore)				
Categories	**No of consumers**	**Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)**	**Energy Charge (paise/ kWh)**	**Annual Sales (MU)**	**Connected Load/ Contract Demand (HP/kVA)**	**Revenue from Fixed/ Demand Charge**	**Revenue from Energy Charge**	**Total**	**Average Billing Rate**	**% Tariff Increase**
LT Category										
LT I Domestic										
BPL (0-30 Units)	243656	3	78	68		0.88	5	**6**	**0.91**	0.4%
Consumption > 30 Units Per Month				12470						
0-100 Units	8970275	30	247	8546		323	2111		2.85	0.1%
101-300 Units	2949131	30	450	2856		106	1285		4.87	2.8%
301-500 Units	245761	30	625	462		9	289		6.44	4.6%
500 -1000Units	94409	30	725	288		3	209		7.37	4.7%
above 1000 units	23586	30	750	318		1	238		7.53	8.0%
Three Phase Connection	224705	100				27				
Less than 10 KW										
Sub Total Domestic	12751523			**12538**		**470**	**4137**	**4607**	**3.67**	1.7%
LT II Non Domestic										
0-20 kW	**1209103**			**3238**	**1920049**	**218**	**1788**	**2005**	**6.19**	4.8%
Institutions, Hospitals &										
0-200 Units	36273	150	430	162		7	70	76	4.70	-1.1%
Above 200 Units	108819	150	600	162		20	97	117	7.21	4.7%
B) Others										
0-200 Units	302276	150	450	1328		54	597	652	4.91	3.3%
Above 200 units	761735	150	645	1587		137	1023	1161	7.31	6.2%
>20- 50 kW	**12857**	**150**	640	**459**	**546693**	**98**	**294**		**8.54**	1.0%
>50 kW	**1669**	**150**	840	**117**	**144120**	**26**	**98**		**10.62**	-3.4%
Sub Total Non-Domestic				**3814**		**342**	**2180**	**2521**	**6.61**	3.8%
LT III Public Water Works	44036									
0-20 kW	43266	40	172	406	217945	10	70		1.98	0.2%
20-40 kW	573	50	222	119	20190	1	26		2.32	0.1%
40-50 kW	197	70	302	66	12429	1	20		3.18	0.1%
Sub Total PWW				**591**		**13**	**116**	**129**	**2.18**	0.2%
LT IV Agriculture										
Unmetered Tariff	2739349			7069						
Consumption norm <1318 hrs/HP	1426433	200			2289193	549			**2.05**	9.2%
Consumption norm >1318	0	235			3735000	1053			**2.40**	7.5%
(Including Poultry Farms)	1312916	15	149	6988	5828008	105	1041		1.64	0.2%
Sub Total Agriculture				**14057.194**		**1708**	**1041**	**2749**	**1.96**	4.6%
LT V Industries										
0-20 KW	219688	150	390	1956	1941817	40	763		4.10	7.4%
Above 20 KW	46955.0	100	540	2593	2541231	122	1400		5.87	10.0%
TOD Consumption										
2200 Hrs-0600 Hrs			-85	1169			**-99**			
1200 Hrs- 1800Hrs			0	2031			**0**			
0900 Hrs-1200 Hrs			80	666			**53**			
1800 Hrs-2200 Hrs			110	683			**75**	**29**		
Sub Total General Motive Power	266643			**4549**	**4483049**	**162**	**2192**	**2354**	**5.17**	9.0%
LT VI Street Light										
Grampanchayat, A, B & C Class Municipal Council	64494	30	310	436	258123.5	9	135		3.31	5.9%
Municipal Corporation Areas	7405	30	370	296	67360.8	2	109		3.78	5.1%
Sub Total Street Light	71,899			**732**	325484.3	**12**	**245**	**256**	**3.50**	5.5%
LT VII Temporary Connection										
Connections (Other Purposes)	15,722	250	1,150	245		5	282		11.69	3.4%
Connections (Religious)		200	252	3		0	1		2.52	0.1%
				248		**5**	**283**	**287**	**11.56**	3.4%
LT VIII Advertisement and	1606	400	1,600	**4**		0.77	6	**7**	**17.96**	5.9%
Crematoriums & Burial Grounds :- New Category	38	200	252	**1**		0	0	**0**	**2.66**	0.1%
TOTAL LT CATEGORY	17114445			**36534**	**4808533**	**2711**	**10200**	**12911**	**3.53**	4.1%
Total MSEDCL	17129235			**67439**		**3859**	**25897**	**29757**	**4.41**	3.0%
Bhiwandi Sales			233	3043			709	709	**2.33**	2.2%
Standby Charges								396		
Total MSEDCL Sales				**70482**		**3859**	**26606**	**30862**	**4.38**	2.9%

Annexure II: Approved Tariff Schedule

MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD. (WITH EFFECT FROM SEPTEMBER 1, 2010)

The Maharashtra Electricity Regulatory Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, has determined, by its Order dated September 12, 2010 in the matter of Case No.111 of 2009, the retail tariff for supply of electricity by Maharashtra State Electricity Distribution Company Limited (MSEDCL) for various classes of consumers as applicable from September 1, 2010.

GENERAL:

1. These tariffs supersede all tariffs so far in force including in the case where any agreement provides specifically for continuance of old agreemental tariff, or any modifications thereof as may have been already agreed upon.
2. Tariffs are subject to revision and/or surcharge that may be levied by MSEDCL from time to time as per the directives of the Commission.
3. The tariffs are exclusive of Electricity Duty, Tax on Sale of Electricity (ToSE) and other charges as levied by Government or other competent authorities and the same, will be payable by the consumers in addition to the charges levied as per the tariffs hereunder.
4. The tariffs are applicable for supply at one point only.
5. MSEDCL reserves the right to measure the Maximum Demand for any period shorter than 30 minutes period of maximum use, subject to conformity with the prevalent Supply Code, in cases where MSEDCL considers that there are considerable load fluctuations in operation.
6. The tariffs are subject to the provisions of the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 in force (i.e., as on September 1, 2010) and directions, if any that may be issued by the Commission from time to time.
7. Unless specifically stated to the contrary, the figures of Energy Charge relate to Rupees per unit (kWh) charge for energy consumed during the month.
8. Fuel Adjustment Costs (FAC) Charge as may be approved by the Commission from time to time shall be applicable to all categories of consumers and will be charged over

and above the tariffs on the basis of FAC formula specified by the Commission and computed on a monthly basis.

LOW TENSION (LT) – TARIFF

LT I: LT – Residential (BPL)

Applicability

Residential consumers who have a sanctioned load of up to and less than 0.1 kW, and who have consumed less than 360 units per annum in the previous financial year. The applicability of BPL category will have to be assessed at the end of each financial year. In case any BPL consumer has consumed more than 360 units in the previous financial year, then the consumer will henceforth, be considered under the LT-I residential category. Once a consumer is classified under the LT-I category, then he cannot be classified under BPL category.

The categorisation of such BPL consumers will be reassessed at the end of the financial year, on a pro-rata basis. Similarly, the classification of BPL consumers who have been added during the previous year would be assessed on a pro-rata basis, i.e., 30 units per month.

All the new consumers subsequently added in any month with sanctioned load of upto and less than 0.1 kW and consumption between 1 to 30 units (on pro rata basis of 1 unit/day) in the first billing month, will be considered in BPL Category.

No Institutions will be covered under BPL category.

Rate Schedule

Consumption Slab (kWh)	Fixed /Demand Charge	Energy Charge (Rs./kWh)
BPL Category	Rs. 3 per month	0.78

LT I: LT – Residential

Applicability

Electricity used at Low/Medium Voltage for operating various appliances used for purposes like lighting, heating, cooling, cooking, washing/cleaning, entertainment/leisure, pumping in the following places:

a) Private residential premises,

b) Premises exclusively used for worship such as temples, gurudwaras, churches, mosques, etc. Provided that Halls, Gardens or any other portion of the premises that may be let out for consideration or used for commercial activities would be charged at LT-II tariff as applicable.

c) All Students Hostels affiliated to Educational Institutions.

d) All Ladies Hostels, such as Students (Girls) Hostels, Working Women Hostels, etc.

e) Other type of Hostels, like (i) Homes/Hostels for Destitute, Handicap or Mentally deranged persons (ii) Remand Homes (iii) Dharamshalas, etc., subject to verification and confirmation by MSEDCL's concerned Zonal Chief Engineer.

f) Telephone booth owned/operated by handicapped person subject to verification and confirmation by MSEDCL's concerned Zonal Chief Engineer.

g) Residential premises used by professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc., in furtherance of their professional activity in their residences but shall not include Nursing Homes and any Surgical Wards or Hospitals.

<u>Rate Schedule</u>

Consumption Slab (kWh)	**Fixed/Demand Charge**	**Energy Charge (Rs./kWh)**
0-100 units	Single Phase : Rs. 30 per month Three Phase : Rs. 100 per month [$$]	2.47
101 – 300 units		4.37
301 – 500 units		6.25
501 – 1000 units		7.25
Above 1000 units (balance units)		7.50

<u>**Note:**</u>

a) [$$]:. Additional Fixed Charge of Rs. 100 per 10 kW load or part thereof above 10 kW load shall be payable.

b) Professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc., occupying premises exclusively for conducting his profession, shall not be eligible for this tariff.

LT II: LT– Non-Residential or Commercial

Applicability

(A) 0-20kW

(i) Educational Institutions, Hospitals and Dispensaries:

Electricity used at Low/Medium Voltage in all Educational Institutions, Hospitals and Dispensaries upto a load of 20 kW.

(ii) Others

Electricity used at Low/Medium Voltage in all non-residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing/cleaning, entertainment/leisure, pumping in following places:

a) Non-Residential, Commercial and Business premises, including Shopping malls
b) Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Hospitality, Leisure, Meeting Halls and Recreation places.
c) Electricity used for the external illumination of monumental/historical/heritage buildings approved by MTDC.
d) Construction purposes upto 1 year

Consumption Slab (kWh)	**Fixed/ Demand Charge**	**Energy Charge (Rs./kWh)**
(A) 0-20 kW		
(i) Educational Institutions, Hospitals and Dispensaries		
0 to 200 units per month	Rs. 150 per month	4.30
Above 200 units per	Rs. 150 per month	6.00

Consumption Slab (kWh)	**Fixed/ Demand Charge**	**Energy Charge (Rs./kWh)**
month (only balance consumption)		
(ii) Others		
0 to 200 units per month	Rs. 150 per month	4.50
Above 200 units per month (only balance consumption)	Rs. 150 per month	6.45

(B) **> 20 kW and ≤ 50 kW and (C) > 50 kW**

<u>Applicability</u>

Electricity used at Low/Medium Voltage in all non-residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing/cleaning, entertainment/leisure, pumping in following places:

e) Non-Residential, Commercial and Business premises, including Shopping malls
f) All Educational Institutions, Hospitals and Dispensaries above 20 kW
g) Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Hospitality, Leisure, Meeting Halls and Recreation places.
h) Electricity used for the external illumination of monumental/historical/heritage buildings approved by MTDC.
i) Construction purposes upto 1 year

Consumption Slab (kWh)	**Fixed/ Demand Charge**	**Energy Charge (Rs./kWh)**
(B) > 20 kW and ≤ 50 kW	<u>Rs. 150 per kVA per month</u>	6.50
(C) > 50 kW		8.40

TOD Tariffs (in addition to above base tariffs)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.80
1200 to 1800 hours		0.00
1800 to 2200 hours		1.10
2200 to 0600 hours		-0.85

Note:

The ToD tariff is applicable for LT-II (B) and (C) category, and optionally available to LT- II (A) having ToD meter installed.

LT III: LT - Public Water Works and Sewage Treatment Plants

Applicability

Applicable for LT Power Supply to Public Water Supply Schemes and Sewage Treatment Plants.

Rate Schedule

Consumer Category	**Fixed/Demand Charge**	**Energy Charge (Rs./kWh)**
(A) 0 - 20 kW	Rs 40 per kVA per month	1.72
(B) >20 kW and ≤ 40 kW	Rs 50 per kVA per month	2.22
(C) >40 kW and ≤ 50 kW	Rs 70 per kVA per month	3.02
TOD Tariffs (in addition to above base tariffs)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.80
1200 to 1800 hours		0.00
1800 to 2200 hours		1.10
2200 to 0600 hours		-0.85

LT IV: LT- Agricultural

Applicability

Applicable for motive power services exclusively for Agricultural pumping loads and pre-cooling & cold storage for Agricultural Produce on LT Supply.

Rate Schedule

Consumer Category	**Fixed/Demand Charge**	**Energy Charge (Rs./kWh)**
LT IV – Agriculture		
Un-metered Tariff		
Category 1 Zones*		
(a) 0-5 HP	Rs. 276 per kW per month-(Rs 206 per HP per month)	Nil
(b) Above 5 HP	Rs. 315 per kW per month-(Rs 235 per HP per month)	Nil
Category 2 Zones#		
(a) 0-5 HP	Rs 237 per kW per month-(Rs. 176 per HP per month)	
(b) Above 5 HP	Rs 268 per kW per month-(Rs. 200 per HP per month)	
Metered Tariff (including Poultry Farms)	Rs 20 per kW per month-(Rs 15 per HP per month)	1.54

***Category 1 Zones (with consumption norm above 1318 hours/HP/year)**		
1) Bhandup (U)	2) Pune	3) Nashik

#Category 2 Zones (with consumption norm below 1318 hours/HP/year)		
1) Amravati	2) Aurangabad	3) Kalyan
4) Konkan	5) Kolhapur	6) Latur
7) Nagpur (U)	8) Nagpur	

Note:

i. Above tariffs shall be applicable irrespective of whether pre-cooling & cold storage for Agricultural Produce are being used by farmers or traders, and irrespective of the ownership pattern.

ii. The Flat Rate tariff as above will remain in force only till meters are installed, and once meter is installed; the consumer will be billed as per the tariff applicable to metered agricultural consumers.

iii. The list of Category 1 Zones (with consumption norm above 1318 hours/ HP/year) & Category 2 Zones (with consumption norm below 1318 hours/HP/year) is given above.

iv. The Poultry (exclusively undertaking Layer & Broiler activities) consumers as well as High Tech Agricultural (i.e. Tissue Culture, Green House, Mushroom activities) consumers will be billed as per agricultural metered tariff.

v. Supply under this tariff will be given for minimum load of 2 HP. If any consumer requires any load of less than 2 HP for agricultural purposes, he shall be required to pay the Fixed Charge/Energy Charge on this basis as if a load of 2 HP is connected.

vi. This tariff is also available for purpose of operating a cane crusher and/or fodder cutter, etc., for self use for agricultural processing purpose, but not for operating a flour mill, oil mill or expeller in the same premises, either operated by a separate motor or change of belt drive.

vii. One lamp of wattage up to 40 watts will be allowed to be connected to the motive power circuit for use in the pump house.

LT V: LT- Industry

Applicability

Applicable for industrial use at Low/Medium Voltage in premises for purpose of manufacturing, including that used within these premises for general lighting, heating/cooling, etc., excluding Agricultural Pumping Loads. This consumer category also includes IT industry and IT enabled services (as defined in the Government of Maharashtra Policy).

Rate Schedule

Consumer Category	Fixed/Demand Charge	Energy Charge (Paise/kWh)
LT V - Industrial		
(A) 0 - 20 kW (upto and including 27 HP)	Rs. 150 per connection per month	3.90
(B) Above 20 kW (above 27 HP)	Rs. 100 per kVA per month	5.40
TOD Tariff (In addition to above base tariffs)		
0600 hrs - 0900 hrs		0.00
0900 hrs - 1200 hrs		0.80
1200 hrs - 1800 hrs		0.00
1800 hrs - 2200 hrs		1.10
2200 hrs - 0600 hrs		-0.85

Note:

a) The ToD tariff is applicable for LT V (B) and optionally available to LT- V (A) having ToD meter installed.

LT VI: LT- Street Lights

Applicability

Electricity used at Low/Medium Voltage for purpose of public street lighting, lighting in public gardens, traffic island, bus shelters, public sanitary conveniences, police chowkies, traffic lights, public fountains, and other such common public places irrespective of whether such facilities are being provided by the Government or other private parties.

Rate Schedule

Consumer Category	Fixed/Demand Charge	Energy Charge (Rs./kWh)
LT VI - Street Light		
(A) Grampanchayat, A, B & C Class Municipal Council	Rs 30 per KW per month	3.10

(B) Municipal Corporation Areas		3.70

Note:

Street Lightings having 'Automatic Timers' for switching On/Off the street lights would be levied Demand Charges on lower of the following–

a) 50 percent of 'Contract Demand' or
b) Actual 'Recorded Demand'

LT VII: LT-Temporary Supply

Applicability

LT VII (A) – Temporary Supply Religious (TSR)

Electricity supplied at Low/Medium Voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Moharam, Ram Lila, Ambedkar Jayanti, Diwali, Christmas, Guru Nanak Jayanti, etc., or areas where community prayers are held, for a period of up to one (1) year.

LT VII (B) - Temporary Supply Others (TSO)

Electricity used at Low/Medium Voltage on a temporary basis for decorative lighting for exhibitions, circus, film shooting, marriages, etc. and any activity not covered under tariff LT VII (A), and electricity used at low/medium voltage on an emergency basis for purpose of fire fighting activity by the fire department in residential/other premises, for a period of up to one (1) year.

Rate Schedule

Consumption Slab (kWh)	Fixed/Demand Charge	Energy Charge (Rs./kWh)
LT VII (A) – All Units	Rs. 200 per connection per month	2.52
LT VII (B) – All Units	Rs. 250 per connection month	11.50

Note:

In case of LT VII (B), Additional fixed charges of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable

LT VIII: LT - Advertisements and Hoardings

Applicability

Electricity used for the purpose of advertisements, hoardings and other conspicuous consumption such as external flood light, displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such entertainment/leisure establishments except those specifically covered under LT-II as well as electricity used for the external illumination of monumental, historical/heritage buildings approved by MTDC, which shall be covered under LT-II category depending upon Sanctioned Load.

Rate Schedule

Consumption Slab (kWh)	**Fixed / Demand Charge**	**Energy Charge (Rs./kWh)**
All Units	Rs. 400 per connection month	16.00

Note:

The electricity, that is used for the purpose of indicating/displaying the name and other details of the shops or Commercial premises, for which electric supply is rendered, shall not be under LT VIII tariff Category. Such usage of electricity shall be covered under the prevailing tariff of such shops or commercial premises.

LT IX: LT- Crematorium and Burial Grounds

Applicability

Electricity used at Low/Medium Voltage in Crematorium and Burial Grounds for all purposes including lighting, and will be applicable only to the portion catering to such activities, and in case part of the area is being used for other commercial purposes, then a separate meter will have to be provided for the same, and the consumption in this meter will be chargeable under LT-II Commercial rates as applicable.

Rate Schedule

Consumption Slab (kWh)	**Fixed/Demand Charge**	**Energy Charge (Rs./kWh)**
All Units	Rs. 200 per connection per month	2.52

HIGH TENSION (HT) – TARIFF

1. HT I : HT- Industry

<u>Applicability</u>

This category includes consumers taking 3-phase electricity supply at High Voltage for industrial purpose. This Tariff shall also be applicable to IT Industry & IT enabled services (as defined in the Government of Maharashtra policy).

<u>Seasonal Industry</u>

Applicable to Seasonal consumers, who are defined as "One who works normally during a part of the year up to a maximum of 9 months, such as Cotton Ginning Factories, Cotton Seed Oil Mills, Cotton Pressing Factories, Salt Manufacturers, Khandsari/Jaggery Manufacturing Units, or such other consumers who opt for a seasonal pattern of consumption, such that the electricity requirement is seasonal in nature.

<u>Rate Schedule</u>

Consumer Category	**Demand Charge**	**Energy Charge (Rs./kWh)**
HT I - Industry		
Continuous Industry (on express feeder)	Rs.150 per kVA per month	5.27
Non-continuous Industry (not on express feeder)	Rs.150 per kVA per month	4.80
Seasonal Industry	Rs.150 per kVA per month	5.90
TOD Tariff (In addition to above base tariff)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.80
1200 to 1800 hours		0.00
1800 to 2200 hours		1.10
2200 to 0600 hours		-0.85

<u>Note:</u>

i. High Tension Industrial consumers having captive generation facility synchronised with the grid, will pay additional demand charges of Rs. 20/kVA/Month only on the extent of standby contract demand component and not on the entire Contract Demand (Standby Contract demand component).

ii. Standby Charges will be levied on such consumers on the standby component, only if the consumer's demand exceeds the Contract Demand.

iii. This additional Demand Charge will not be applicable, if there is no standby demand & the Captive Unit is synchronised with the Grid only for the export of power.

iv. Only HT industries connected on express feeders and demanding continuous supply will be deemed as HT continuous industry and given continuous supply, while all other HT industrial consumers will be deemed as HT non-continuous industry.

HT II: HT- Commercial

Applicability

HT II (A): EXPRESS FEEDERS

(i)Educational Institutions & Hospitals:

This category covers consumers of electricity such as all Educational Institutions and all Hospitals taking supply at High Voltage on Express Feeders.

(ii) **Others:**

This category also includes consumers taking electricity supply at High Voltage for commercial purposes, including Hotels, Shopping Malls, film studios, cinemas and theatres, including multiplexes on Express feeder.

This category includes consumers taking supply for Construction purposes at HT voltages, including Infrastructure Projects, Buildings, Hill Station, etc. on Express feeder.

The Consumers belonging to HT II requiring a single point supply for the purpose of downstream consumption by separately identifiable entities will have to either operate through a franchisee route or such entities will have to take individual connections under relevant category. These downstream entities will pay appropriate tariff as applicable as per MSEDCL Tariff Schedule, i.e., LT II.

HT II (B): NON- EXPRESS FEEDERS

(i)Educational Institutions & Hospitals:

This category covers consumers of electricity such as all Educational Institutions and all Hospitals taking supply at High Voltage on Non -Express Feeders.

(ii) **Others:**

This category also includes consumers taking electricity supply at High Voltage for commercial purposes, including Hotels, Shopping Malls, film studios, cinemas and theatres, including multiplexes on Non-express feeder.

This category includes consumers taking supply for Construction purposes at HT voltages, including Infrastructure Projects, Buildings, Hill Station, etc. on Non-Express feeder.

The Consumers belonging to HT II requiring a single point supply for the purpose of downstream consumption by separately identifiable entities will have to either operate through a franchisee route or such entities will have to take individual connections under relevant category. These downstream entities will pay appropriate tariff as applicable as per MSEDCL Tariff Schedule, i.e., LT II.

Rate Schedule

Consumption Slab (kWh)	**Fixed/ Demand Charge**	**Energy Charge (Rs./kWh)**
HT II - Commercial		
(A) Express Feeders		
(i) Educational institutions & hospitals	Rs 150 per kVA per month	7.65
(ii) Others		7.95
(B) Non-express feeders		

Consumption Slab (kWh)	**Fixed/ Demand Charge**	**Energy Charge (Rs./kWh)**
(iii) Educational institutions & hospitals	Rs 150 per kVA per month	7.15
(iv) Others		7.45
TOD Tariffs (in addition to above base tariffs)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.80
1200 to 1800 hours		0.00
1800 to 2200 hours		1.10
2200 to 0600 hours		-0.85

HT III: HT - Railway Traction

Applicability

This tariff is applicable to Railway Traction only.

Rate Schedule

Consumer Category	**Demand Charge (Rs/kVA/month)**	**Energy Charge (Rs./kWh)**
HT III - Railway Traction	Nil	5.80

HT IV: HT - Public Water Works and Sewage Treatment Plants

Applicability

This tariff will be applicable for all Public Water Supply scheme consumers and Sewage Treatment Plants taking supply at High Voltage.

Rate Schedule

Consumer Category	**Demand Charge**	**Energy Charge (Rs./kWh)**

HT IV - Public Water Works		
Express Feeders	Rs. 150 per kVA per month	3.75
Non- Express Feeders		3.60
TOD Tariff (In addition to above base tariff)		
0600 to 0900 hours		0.00
0900 to 1200 hours		0.80
1200 to 1800 hours		0.00
1800 to 2200 hours		1.10
2200 to 0600 hours		-0.85

HT V: HT – Agricultural

Applicability

Applicable for High Tension Agricultural Pumping loads, including HT Lift Irrigation Schemes (LIS) irrespective of ownership and also for

(i) Poultry (exclusively for Layer & Broiler Activities),

(ii) High Tech Agricultural (i.e. Green Houses, Tissue Culture, Mushroom, etc.) purpose;

(iii) Pre-cooling & Cold Storage for Agricultural Produce

Note:

Above shall be applicable irrespective of whether pre-cooling & cold storage are being used by farmers or traders, and irrespective of the ownership pattern.

Rate Schedule

Consumption Slab (kWh)	**Demand Charge**	**Energy Charge (Rs./kWh)**
All Units	Rs. 25 per kVA per month	2.15

HT VI:

Applicability

Applicable for consumers taking supply at HT voltages at single point for consumption within HT Residential Complexes, viz., Group Housing Societies, Colonies of industrial consumers and educational institutions, and Commercial Complexes only.

Rate Schedule

Consumer Category	**Demand Charge**	**Energy Charge (Rs./kWh)**
HT VI		
Group Housing Society	Rs. 125 per kVA per month	3.72
Commercial Complex		6.30

Note:

i. Demand Charges as above will however be applicable only when the power supply to such Residential/Commercial Complexes is given through independent point of supply. In case of mixed complexes, use of sub-meters is essential for arriving at energy charges for type of category. HT VI tariff will be applicable only for Group Housing Societies and Colonies of industrial consumers and educational institutions.

ii. MSEDCL is directed to ensure metering arrangements so that consumers currently classified under HT-VI Commercial Category, and requiring a single point supply, will have to either operate through a franchise route or take individual connections under relevant category.

HT VII: HT- Mula Pravara Electric Co-op Society

Applicability

Applicable to Mula Pravara Electric Co-op Society only.

Rate Schedule

Consumption Slab (kWh)	**Demand Charge**	**Energy Charge (Rs./kWh)**
All Units	Rs. 100 per kVA per month	2.62

Note:

Demand charge is to be levied on simultaneous Maximum Demand across all the input points.

HT VIII - HT - Temporary Supply

Applicability

Electricity used at High Voltage on a temporary basis of supply for any decorative lighting for exhibitions, circus, film shooting, marriages, etc., for a period of less than one (1) year

This category also includes electricity supplied at High Voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Moharam, Ram Lila, Ambedkar Jayanti, Diwali, Christmas, Guru Nanak Jayanti, etc. or areas where community prayers are held.

Rate Schedule

Consumption Slab (kWh)	Fixed/Demand Charge	Energy Charge (Rs./kWh)
Temporary Supply - All units	Rs. 200 per connection per month	10.12

Note:

Additional fixed charges of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.

MISCELLANEOUS AND GENERAL CHARGES

Fuel Adjustment Cost (FAC) Charges

The FAC charge will be determined based on the approved Formula and relevant directions, as may be given by the Commission from time to time and will be applicable to all consumer categories for their entire consumption. The FAC Formula takes into account any change in the cost of own generation and power purchase due to variations in the fuel cost. Fuel Price shall mean the landed cost of fuel at power station battery limits and will consist of only following components:

a) Basic Fuel Price including statutory taxes, duties, royalty as applicable

b) Transportation (freight) cost by rail/road/pipeline or any other means including transportation service charges for bringing fuel up to the Power Station boundary.

c) Fuel Treatment Charges such as washing / cleaning charges, Sizing Crushing Charges, Fuel Analysis Charges etc. for making fuel up to the required grade / quality

d) Fuel Handling Charges, including that towards loading and unloading charges for bringing fuel to the power station boundary.

Besides above, the Commission specifies a ceiling on 'transportation service charge', at 2% of the freight charge.

The FAC charge shall be computed and levied/refunded, as the case may be, on a monthly basis. The following Formula shall be used for computing FAC:

FAC = C + I + B where,

FAC = Total Fuel Cost and Power Purchase Cost Adjustment

C = Change in cost of own generation and power purchase due to variation in the fuel cost,

I = Interest on Working Capital,

B = Adjustment Factor for over-recovery/under-recovery.

The details for each month shall be available on MSEDCL website at www.mahadiscom.in.

Electricity Duty

The Electricity Duty and Tax on Sale of Electricity will be charged in addition to charges levied as per the tariffs mentioned hereunder (as approved by the Commission) as per the Government guidelines from time to time. However, the rate and the reference number of the Government Resolution/ Order vide which the Electricity Duty and Tax on Sale of

Electricity is made effective, shall be stated in the bill. A copy of the said Resolution/Order shall be made available on MSEDCL website at www.mahadiscom.in.

Power Factor Calculation

Wherever, the average power factor measurement is not possible through the installed meter, the following method for calculating the average power factor during the billing period shall be adopted-

$$\text{Average Power Factor} = \frac{Total(kWH)}{Total(kVAh)}$$

$$\text{Wherein the kVAh is} = \sqrt{\sum(kWh)^2 + \sum(RkVAh)^2}$$

(i.e., Square Root of the summation of the squares of kWh and RkVAh)

Power Factor Incentive (Applicable for HT I, HT II, HT IV, HT V and HT VI categories, as well as LT II (B), LT II (C), LT III, and LT V (B) categories)

Whenever the average power factor is more than 0.95, an incentive shall be given at the rate of the following percentages of the amount of the monthly bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Incentive
1	0.951 to 0.954	0.95	0%
2	0.955 to 0.964	0.96	1%
3	0.965 to 0.974	0.97	2%
4	0.975 to 0.984	0.98	3%
5	0.985 to 0.994	0.99	5%
6	0.995 to 1.000	1.00	7%

Note:

PF to be measured/computed upto 3 decimals, after universal rounding off

Power Factor Penalty (Applicable for HT I, HT II, HT IV, HT V and HT VI categories, as well as LT II (B), LT II (C), LT III, and LT V (B) categories)

Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of the following percentages of the amount of the monthly bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Penalty
1	0.895 to 0.900	0.90	0%
2	0.885 to 0.894	0.89	2%
3	0.875 to 0.884	0.88	3%
4	0.865 to 0.874	0.87	4%
5	0.855 to 0.864	0.86	5%
6	0.845 to 0.854	0.85	6%
7	0.835 to 0.844	0.84	7%
8	0.825 to 0.834	0.83	8%
9	0.815 to 0.824	0.82	9%
10	0.805 to 0.814	0.81	10%
...	...	...	...

Note:

PF to be measured/computed upto 3 decimals, after universal rounding off

Prompt Payment Discount

A prompt payment discount of one percent on the monthly bill (excluding Taxes and Duties) shall be available to the consumers if the bills are paid within a period of 7 days from the date of issue of the bill, or within 5 days of the receipt of the bill, whichever is later.

Delayed Payment Charges (DPC)

In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of 2 percent on the total electricity bill (including Taxes and Duties) shall be levied on the bill amount. For the purpose of computation of time limit for payment of bills, “the day of presentation of bill” or “the date of the bill” or "the date of issue of the bill", etc. as the case may be, will not be excluded.

Rate of Interest on Arrears

The rate of interest chargeable on arrears will be as given below for payment of arrears-

Sl.	Delay in Payment (months)	Interest Rate per annum (%)
1	Payment after due date up to 3 months (0-3)	12
2	Payment made after 3 months and before 6 months (3-6)	15
3	Payment made after 6 months (>6)	18

Load Factor Incentive

Consumers having load factor over 75% upto 85% will be entitled to a rebate of 0.75% on the energy charges for every percentage point increase in load factor from 75% to 85%. Consumers having a load factor over 85 % will be entitled to rebate of 1% on the energy charges for every percentage point increase in load factor from 85%. The total rebate under this head will be subject to a ceiling of 15% of the energy charges for that consumer. This incentive is limited to HT I and HT II categories only. Further, the load factor rebate will be available only if the consumer has no arrears with MSEDCL, and payment is made within seven days from the date of the bill. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by MSEDCL, and the same is being made as scheduled. MSEDCL has to take a commercial decision on the issue of how to determine the time frame for which the payments should have been made as scheduled, in order to be eligible for the Load Factor incentive.

The Load Factor has been defined below:

$$\text{Load Factor} = \frac{\text{Consumption during the month in MU}}{\text{Maximum Consumption Possible during the month in MU}}$$

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor x (Total no. of hrs during the month less planned load shedding hours*)

* - Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme.

In case the billing demand exceeds the contract demand in any particular month, then the load factor incentive will not be payable in that month. (The billing demand definition excludes the demand recorded during the non-peak hours i.e. 22:00 hrs to 06:00 hrs and therefore, even if the maximum demand exceeds the contract demand in that duration, load factor incentives would be applicable. However, the consumer would be subjected to the penal charges for exceeding the contract demand and has to pay the applicable penal charges).

Penalty for exceeding Contract Demand

In case, a consumer (availing Demand based Tariff) exceeds his Contract Demand, he will be billed at the appropriate Demand Charge rate for the Demand actually recorded and will be additionally charged at the rate of 150% of the prevailing Demand Charges (only for the excess Demand over the Contract Demand).

In case any consumer exceeds the Contract Demand on more than three occasions in a calendar year, the action taken in such cases would be governed by the Supply Code.

Additional Demand Charges for Consumers having Captive Power Plant

For customers having Captive Power Plant (CPP), the additional demand charges would be at a rate of Rs. 20/ kVA/month only on extent of Stand-by demand component, and not on the entire Contract Demand. Additional Demand Charges will be levied on such consumers on the Stand-by component, only if the consumer’s demand exceeds the Contract Demand.

Security Deposit

1) Subject to the provisions of sub-section (5) of Section 47 of the Act, the Distribution Licensee may require any person to whom supply of electricity has been sanctioned to deposit a security in accordance with the provisions of clause (a) of sub-section (1) of Section 47 of the Electricity Act, 2003.
2) The amount of the security shall be an equivalent of the average of three months of billing or the billing cycle period, whichever is lesser. For the purpose of determining the average billing, the average of the billing to the consumer for the last twelve

months, or in cases where supply has been provided for a shorter period, the average of the billing of such shorter period, shall be considered:

Provided that in the case of seasonal consumers, the billing for the season for which supply is provided shall be used to calculate the average billing.

3) Where the Distribution Licensee requires security from a consumer at the time of commencement of service, the amount of such security shall be estimated by the Distribution Licensee based on the tariff category and contract demand / sanctioned load, load factor, diversity factor and number of working shifts of the consumer.

4) The Distribution Licensee shall re-calculate the amount of security based on the actual billing of the consumer once in each financial year.

5) Where the amount of security deposit maintained by the consumer is higher than the security required to be maintained under MERC (Supply Code) Regulation, 2005, the Distribution Licensee shall refund the excess amount of such security deposit in a single payment:

Provided that such refund shall be made upon request of the person who gave the security and with an intimation to the consumer, if different from such person, shall be, at the option of such person, either by way of adjustment in the next bill or by way of a separate cheque payment within a period of thirty (30) days from the receipt of such request:

Provided further that such refund shall not be required where the amount of refund does not exceed the higher of ten (10) per cent of the amount of security deposit required to be maintained by the consumer or Rupees Three Hundred.

6) Where the amount of security re-calculated pursuant as above, is higher than the security deposit of the consumer, the Distribution Licensee shall be entitled to raise a demand for additional security on the consumer.

Provided that the consumer shall be given a time period of not less than thirty days to deposit the additional security pursuant to such demand.

7) Upon termination of supply, the Distribution Licensee shall, after recovery of all amounts due, refund the remainder amount held by the Distribution Licensee to the person who deposited the security, with an intimation to the consumer, if different from such person.

8) A consumer - (i) with a consumption of electricity of not less than one lac (1,00,000) kilo-watt hours per month; and (ii) with no undisputed sums payable to the Distribution Licensee under Section 56 of the Act may, at the option of such consumer, deposit security, by way of cash, irrevocable letter of credit or unconditional bank guarantee issued by a scheduled commercial bank.

9) The Distribution Licensee shall pay interest on the amount of security deposited in cash (including cheque and demand draft) by the consumer at a rate equivalent to the bank rate of the Reserve Bank of India:

   Provided that such interest shall be paid where the amount of security deposited in cash under the Regulation 11 of Supply Code of is equal to or more than Rupees Fifty.

10) Interest on cash security deposit shall be payable from the date of deposit by the consumer till the date of dispatch of the refund by the Distribution Licensee.

Definitions:

<u>Billing Demand for LT Consumer Categories</u>

Billing Demand for LT II (B), LT II (C), LT III and LT V (B) category having MD based tariff:-

Monthly Billing Demand will be the higher of the following:

a) 65% of the Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
b) 40% of the Contract Demand

<u>**Note:**</u>

- Demand registered during the period 0600 to 2200 hrs. will only be considered for determination of the Billing demand.
- In case of change in Contract Demand, the period specified in Clause (a) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

<u>Billing Demand for HT Consumer Categories</u>

Billing Demand for HT I, HT II, HT III, HT IV, HT V, HT VI, and HT VII)

Monthly Billing Demand will be the higher of the following:

iv. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours

v. 75% of the highest billing demand recorded during the preceding eleven months, subject to the limit of Contract Demand

vi. 50% of the Contract Demand.

Note:

- Demand registered during the period 0600 to 2200 hrs will only be considered for determination of the Billing demand.
- In case of change in Contract Demand, the period specified in Clause (i) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

HT Seasonal Category (HT I)

During Declared Season, Monthly Billing Demand will be the higher of the following:

iv. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours

v. 75% of the Contract Demand

vi. 50 kVA.

During Declared Off-season

Monthly Billing Demand will be the following:

i) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours

The Billing Demand for the consumers with CPP will be governed as per the CPP Order in case No. 55 and 56 of 2003

Contract Demand

Contract Demand means demand in Kilowatt (kW) / Kilo –Volt Ampere (kVA), mutually agreed between MSEDCL and the consumer as entered into in the agreement or agreed through other written communication (For conversion of kW into kVA, Power Factor of 0.80 shall be considered).

Sanctioned Load

Sanctioned Load means load in Kilowatt (kW) mutually agreed between MSEDCL and the consumer.

In case the meter is installed on the LV/MV side, the methodology to be followed for billing purpose is as follows

- 2% to be added to MV demand reading, to determine the kW or kVA billing demand, and
- 'X' units to the MVA reading to determine the total energy compensation to compensate the transformation losses, where is calculated as follows

  'X' = (730 * KVA rating of transformer)/500 Units/month, to compensate for the iron losses, plus one percent of units registered on the LT side for copper losses.

APPENDIX 1

List of persons who attended the Technical Validation Session held on March 17, 2010

S.No	Name
	MSEDCL Officials
1	Shri S.V. Bapat
2	Shri D.N. Sangelkar
3	Shri Amol A. More
4	Shri S.S. Katkar
5	Shri Anil V. Kale
6	Shri Sanjay Jha
7	Shri Ajay Mehta
8	Shri Abhijeet Deshpande
9	Shri Mahesh Kamble
10	Shri B.K. Verulkar
11	Shri D.D. Wavhal
12	Shri S. R. Dabhade
	Others
13	Shri N. Ponrathnam
14	Shri Ashwini Chitnis
15	Shri Ashok Pendse
16	Shri Rakshpal Abrol
17	Shri S.L. Patil
18	Shri Raghunath Mane
	Consultants to Commission
19	Shri M Palaniappan
20	Shri Amit Mittal
21	Shri S. R. Karkhanis
22	Shri G. S. Rao

23	Shri Saurabh Gupta

APPENDIX 2

List of persons who submitted written objections and attended the Public Hearing at six locations in the State