Before the

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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Case No. 72 of 2007

IN THE MATTER OF

Maharashtra State Electricity Distribution Company Ltd.'s (MSEDCL) Petition for approval of Annual Performance Review for FY 2007-08 and Tariff for FY 2008-09

Shri A. Velayutham, Member Shri S. B. Kulkarni, Member

Date: June 20, 2008

ORDER

In accordance with the MERC (Terms and Conditions of Tariff) Regulations, 2005, and upon directions from the Maharashtra Electricity Regulatory Commission (Commission), Maharashtra State Electricity Distribution Company Limited (MSEDCL), submitted its application for Annual Performance Review for FY 2007-08 and determination of Aggregate Revenue Requirement (ARR) and tariff for FY 2008-09, 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, hereby issues this Operative 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, as under.

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List Of Abbrevations

AAD	Advance Against Depreciation					
AIMA	Ambad Industries & Manufacturers' Association					
A&M	Administration and Maintenance					
A&G	Administration and General					
APDRP	Accelerated Power Development and Reforms Programme					
APR	Annual Performance Review					
ARR	Annual Revenue Requirement					
AS	Accounting Standard					
ASC	Additional Supply Charge					
ATE	Appellate Tribunal for Electricity					
BEST	Brihanmumbai Electric Supply & Transport Undertaking					
BPL	Below Poverty Line					
CAGR	Compounded Annual Growth Rate					
CEA	Central Electricity Authority					
CERC	Central Electricity Regulatory Commission					
CGS	Central Generating Stations					
CII	Confederation of Indian Industry					
COD	Commercial Operation Date					
COS	Cost of Supply					
COSIA	Chamber of Small Industries Association					
СРІ	Consumer Price Index					
СРР	Captive Power Plant					
Commission/MERC	Maharashtra Electricity Regulatory Commission					
Cr	Crore					
DA	Dearness Allowance					
DPC	Dabhol Power Company					
DSM	Demand Side Management					

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EA 2003/ Act	Electricity Act, 2003
EPS	Electric Power Survey
ESO	Energy Sent Out
FAC	Fuel Adjustment Cost
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
IASC	Incremental Additional Supply Charge
kVA	Kilo-Volt Ampere
kW	Kilo Watt
kWh	Kilo Watt Hour / Unit
LMC	load management charge
LT	Low Tension
MAT	Minimum Alternate Tax
MCCIA	Mahratta Chamber of Commerce, Industries and Agriculture
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

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MYT	Multi Year Tariff						
NCE	Non Conventional Energy						
NIMA	Nashik Industries & Manufacturers' Association						
NMC	Nasik Municipal Corporation						
NTP	National Tariff Policy						
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						
TBIA	Thane Belapur Industries Association						
T&D	Transmission and Distribution						
ToD	Time of Day						
ТАН	The Association of Hospitals						
TIMA	Tarapur Industrial Manufacturers' Association						

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TPC	The Tata Power Company Ltd.
TTSC	Total Transmission System Cost
TVS	Technical Validation Session
TSSIA	Thane Small Scale Industries Association
UI	Unscheduled Interchange
UFR	Under Frequency Relay
VDL	Variable Distribution Loss
VIA	Vidharba Industries Association
VRS	Voluntary Retirement Scheme
WPI	Wholesale Price Index
WRPC	Western Region Power Committee

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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 General Resolution No. ELA-1003/P.K.8588/Bhag-2/Urja-5 Dated January 24, 2005 with effect from June 6, 2005 according to the provisions envisaged in the Electricity Act 2003.

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 State, except the Mumbai license area.

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 ARR And Tariff Petition for FY 2005-06 and FY 2006-07

MSEDCL submitted its ARR and Tariff Petition for FY 2006-07 on February 28, 2006. The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act, 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 MSEDCL, issues raised during the Public Hearing, and all other relevant material, issued the operative Order on September 29, 2006 and the detailed Order on October 20, 2006 on the ARR Petition of MSEDCL for FY 2005-06 and ARR and Tariff Petition of MSEDCL for FY 2006-07.

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MSEDCL filed a review Petition on the above said Commission's Order on December 5, 2006. The Commission disposed off the Review Petition through its Order dated February 7, 2007, in Case 59 of 2006.

1.4 Commission's Order on MYT Petition for MSEDCL for 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, 2007. The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the Electricity Act, 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 MSEDCL, issues raised during the Public Hearing, and all other relevant material, issued the MYT Order for MSEDCL for the first Control Period, i.e., FY 2007-08 to FY 2009-10, on May 18, 2007 (Operative Order issued on April 27, 2007), which came into effect from May 1, 2007. As the Annual Performance Review for FY 2007-08 and Tariff determination for FY 2008-09 were under process, the various Utilities filed a Petition for continuation of tariff determined for FY 2007-08 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 there under.

1.5 Petition for Annual Performance Review for FY 2007-08 and Determination of Revenue Requirement for FY 2008-09

As per the MERC Tariff Regulations, the application for the determination of tariff has to be made to the Commission not less than 120 days before the date from when the tariff is intended to be made effective. The Commission had directed MSEDCL to submit the Petition for Annual Performance Review latest by November 30 of each year in line with Regulation 9.1 of the Tariff Regulations.

MSEDCL submitted its Petition for Annual Performance Review for FY 2007-08 and Tariff Determination for FY 2008-09 on November 30, 2007, based on actual audited expenditure for FY 2006-07, actual expenditure for first half of FY 2007-08, i.e., from April to September 2007, revised estimate of expenses for the period from October 2007 to March 2008, and projections for FY 2008-09. MSEDCL, in its Petition, requested the Commission to:

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- undertake truing up for FY 2006-07 based on actual expenses and revenue;
- undertake Annual Performance Review for FY 2007-08
- consider revised estimates of ARR of FY 2007-08 for the purpose of determination of revenue requirement for FY 2008-09
- consider expenses allowed by the Commission in its Clarificatory Order dated August 24, 2007, and expenses allowed by the Appellate Tribunal for Electricity vide its judgement dated September 19, 2007 in Appeal No 70 of 2007.
- Consider impact of judgement of the Appellate Tribunal for Electricity dated
 October 1, 2007 in Appeal No. 76 of 2007
- approve the revised ARR and tariff for FY 2008-09.

The Commission, vide its letter dated December 19, 2007, forwarded the preliminary data gaps and information required from MSEDCL. MSEDCL submitted its replies to preliminary data gaps and information requirement on December 24, 2007.

The Commission held a Technical Validation Session (TVS) on MSEDCL's APR for FY 2007-08 and Tariff Petition for FY 2008-09, on December 28, 2008, in the presence of authorised Consumer Representatives. The list of individuals, who participated in the TVS, is provided at Appendix-2. 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, and directed that another TVS would be held on January 3, 2008, before admitting the Petition. During this TVS also, several discrepancies and data inconsistencies/gaps were identified and the Commission directed MSEDCL to submit the additional data and clarifications, to enable the Commission to admit the Petition for further public process. MSEDCL submitted the additional data and clarifications along with its revised APR Petition under affidavit, and the revised APR Petition was admitted by the Commission on January 14, 2008. 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 comments/suggestions from stakeholders on its APR Petition. The Public Notice was published in newspapers on January 15, January 16, and January 17, 2008.

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However, MSEDCL thereafter submitted that there was a delay in printing of the APR Petitions, and also that the APR Petition was being reconsidered and being discussed with the State Government, with a view to reduce the impact on the consumers. MSEDCL indicated that it would take additional time before the printed Tariff Petitions could be made available to the public. The Commission directed MSEDCL to issue Public Notice in all the newspapers in which the Executive Summary of the APR Petition had been printed and the dates of the Public Hearings at different locations were also stipulated, stating that the Public Hearings were postponed till further notice, and would be intimated in due course.

Subsequently, MSEDCL filed a revised APR Petition on February 13, 2008, which was different from the Petition admitted by the Commission earlier, with the basic change being that the interest expenditure on account of servicing of certain GoM liabilities that were not on the books of MSEDCL, were no longer included as a revenue expenditure in the ARR of MSEDCL for FY 2006-07, FY 2007-08 and FY 2008-09, resulting in a reduction in the ARR by around Rs. 1500 crore. The TVS on this revised APR Petition was held on February 25, 2008. During the TVS, it was revealed that MSEDCL still did not have clarity regarding the possibility that the impact on account of servicing of certain GoM liabilities that were not on the books of MSEDCL, would be sought to be passed on to the consumers through in future years. The Commission directed MSEDCL to discuss the matter with the State Government and clarify its stance in the matter, and submit the additional data and revised APR Petition after the TVS at the earliest, to enable the Commission to admit the Petition for further public process.

1.6 Admission of Petition and Public Process

MSEDCL submitted the additional data and clarifications along with its revised APR Petition under affidavit, and the revised APR Petition was admitted by the Commission on March 5, 2008. MSEDCL was directed by the Commission to issue a Public Notice in leading newspapers, and to make copies of its Petition available at its designated offices, to enable interested stakeholders to submit their comments and objections to MSEDCL's Petition for approval of APR for FY 2007-08 and tariff for FY 2008-09.

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

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the suggestions and comments from stakeholders on its Petition. MSEDCL issued the public notices in English and Marathi newspapers inviting comments/suggestions from stakeholders on its APR Petition. The revised Public Notice was published in newspapers on March 10, 2008. The copies of MSEDCL's Petitions and its summary were made available for inspection/purchase to members of the public at MSEDCL's offices and on MSEDCL's website (www.mahadiscom.in) and also on the web site of the Commission (www.mercindia.org.in) in downloadable format. The Public Notice specified that the suggestions/objections, either in English or Marathi, may be filed in the form of 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, etc., in case of MSEDCL. The list of objectors, who participated in the Public Hearing, is provided in **Appendix-3**.

The Commission held Public Hearings at Amravati, Nagpur, Aurangabad, Nashik, Pune, and Navi Mumbai during the period from April 3 to April 16, 2008, as per the following schedule. Consumer Representatives also participated actively in this process.

Sl.	Place /Venue of Public Hearing	Date							
1	Amravati Sant Gyaneshwar Sanskritik Bhavan, Morshi Road,	03.04.2008							
	Amravati								
2	Nagpur Meeting Hall, Ravi Bhavan, Civil Lines Nagpur	04.04.2008							
3	Aurangabad Meeting Hall, Office of the Divisional	07.04.2008							
	Commissioner, Aurangabad								
4	Nashik Niyojan Bhavan, Collector Office Compound, Nasik	09.04.2008							
5	Pune Meeting Hall, Office of the Divisional Commissioner,	11.04.2008							
	Pune								
6	Mumbai Conference Hall, 7 th floor CIDCO Bhavan, CBD,	16. 04.2008							
	Belapur, Navi- Mumbai -400614								

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.

The Commission based on study of all representations and issues raised during the Public Hearing and through written submissions, determined the ARR of MSEDCL for FY 2008-09, and the tariff for wheeling of electricity and retail sale of electricity for MSEDCL for FY 2008-09, and issued its Operative Order on May 31, 2008, with

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the revised tariffs coming into force prospectively, from June 1, 2008, and to remain in force till March 31, 2009.

The salient features of the Operative Order are as follows:

- In this Order, the Commission has undertaken the truing up of MSEDCL's (erstwhile MSEB) expenses and revenue for FY 2001-02, as well as truing up of MSEDCL's expenses and revenue for FY 2006-07, provisional truing up for FY 2007-08, and determined the revenue requirement for FY 2008-09.
- The Commission has undertaken truing up of the ARR and revenue earned by MSEB in FY 2001-02, and ARR and revenue earned by MSEDCL in FY 2006-07, on the basis of the audited accounts of MSEB and MSEDCL for FY 2001-02 and FY 2006-07, respectively.
- 3. The amount of truing up sought by MSEDCL for FY 2001-02 was Rs. 1065 crore, which included carrying cost interest at the rate of 12% per annum for 6 years. The Commission analysed the reasons for the revenue gap estimated by MSEDCL for FY 2001-02. The Commission has accepted the expenses and revenue considered by MSEDCL for FY 2001-02 for most of the heads, except the following:
 - a. The Commission has disallowed the expense of Rs. 264.86 crore towards power purchase from the erstwhile Dabhol Power Company (DPC), since this expense was not included in the original ARR Petition itself, since MSEB had raised counter-claims towards rebate on DPC, and hence, this amount was not payable. MSEDCL has now included this expense under the truing up exercise, and submitted that MSEB's rebate claims of around Rs. 361 crore upto January 2001 and Rs. 306 crore in May 2001, were not accepted in the final settlement with DPC, and hence, this amount towards power purchase from DPC is payable. However, MSEDCL has not submitted any documentary evidence of the entire settlement with DPC, to enable the Commission to validate the claim that the rebate was not considered in the settlement in some form or the other. On MSEDCL's submission of the necessary documents to substantiate its claims, including details of the efforts taken to pursue the rebate claim, the Commission may consider the extent of this expenditure towards power purchase from DPC, at that stage.
 - b. The interest expense of Rs. 107.89 crore towards DPC related bonds have been disallowed, since the Commission has ruled earlier that the investment in DPC bonds form a part of the non-regulated business, and the consumers of MSEB cannot be asked to bear the interest burden on such bonds.

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- c. Thus, the total revenue expenses allowed by the Commission for FY 2001-02, under the truing up exercise amounts to Rs. 13059.94 crore, as compared to Rs. 13432 crore sought by MSEDCL.
- d. In the Tariff Order for FY 2001-02 issued on January 10, 2002, which forms the basis for MSEDCL's request for truing up, the Commission had ruled that the cost of the excess losses should be borne equally by the consumers and the MSEB. Accordingly, the consumers' share was recovered through the levy of a 'T&D Loss Charge' levied to certain consumer categories, while MSEB's share was addressed by considering the cost of 50% of excess losses as additional revenue to MSEB, and correspondingly reducing the ARR of MSEB for FY 2001-02. The Honourable Mumbai High Court, in its Judgment on the Appeal filed by MSEB against this Order of the Commission, appreciated the Commission's efforts in this regard, and the novel approach to tackle the increasing level of T&D losses. The same Judgment also directed that the Commission should allow creation of a Regulatory Asset as a one-time exercise, since the delay in filing the Petition could be attributed towards extraneous reasons. Accordingly, MSEDCL has sought truing up of the revenue gap for FY 2001-02. Since the High Court has upheld the Commission's approach in this regard, the Commission has added the assessed revenue of Rs. 635.9 crore on this account to MSEDCL's actual revenue in FY 2001-02. Accordingly, MSEB's revenue for FY 2001-02 has been considered as Rs. 13528.76 crore, as compared to the revenue of Rs. 12892.86 crore indicated by MSEDCL.
- e. For FY 2001-02, the Commission has thus assessed a revenue surplus of Rs. 468.8 crore, as compared to the gap of Rs. 1064 Crore considered by MSEDCL. The Commission has however, not considered any carrying cost on this surplus, since MSEDCL's claim on account of the expense on power purchase from DPC, is yet to be finalised.
- 4. For FY 2006-07, MSEDCL computed the revenue gap as Rs. 969 crore, after truing up based on audited accounts. The Commission's analysis of the truing up for FY 2006-07 shows that MSEDCL has a surplus of Rs. 214 crore in FY 2006-07, which has been adjusted against the approved revenue requirement for FY 2008-09. The major heads on which the Commission has considered different levels of expenditure and revenue for FY 2006-07 are given below:
 - a. The one-time impact of Rs. 440 crore on account of change in accounting policy on provisioning for leave encashment on the basis of actuarial valuation, in accordance with Accounting Standard (AS) 15 R, has been

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- spread over a period of five years starting from FY 2006-07, since the provisioning is for the past years as well.
- b. MSEDCL has considered the impact of the short-term loan from REC, which was taken to meet working capital requirements, for computing the interest expenses as well as need for Advance against depreciation. Since MSEDCL is entitled only to working capital interest computed on normative basis in accordance with the Commission's Tariff Regulations, the Commission has not considered this loan and its impact, for computing the interest expenses as well as need for Advance against depreciation. Accordingly, the reduction in these two heads of expenditure is around Rs. 398 crore.
- c. MSEDCL has been charging Additional Supply Charges (ASC) to its consumers since October 2006. The Commission has vetted the ASC charged over the period October 2006 to March 2007, and has directed MSEDCL to refund the excess ASC recovered from the consumers on oneto-one basis, as directed in the Tariff Order. However, MSEDCL is yet to refund any excess ASC The excess recovery has happened because MSEDCL has not purchased the quantum of costly power envisaged at the time of the Tariff Order, whereas the ASC has been recovered through the tariffs in accordance with the approved ASC matrix. Under this scenario, if the entire over-recovery is refunded to the consumers on one-to-one basis, it will amount to these consumers not being charged for some proportion of their consumption, which will be incorrect. Hence, the refund has to be undertaken by MSEDCL in such a manner that the consumer at least pays the base energy charge applicable for the respective category for the entire consumption. This will result in MSEDCL having some surplus amount left, which has to be used to offset the expenditure on the non-costly power purchase. The exact additional amount available to MSEDCL for setting off against the base ARR will be known only after MSEDCL undertakes the exercise of refund of excess ASC to the relevant consumers on one-to-one basis, which has to be done for FY 2006-07 immediately. For the purpose of this Order, while truing up the expenses and revenue for FY 2006-07, the Commission has estimated that the additional amount available to MSEDCL for setting off against the base ARR of FY 2006-07 will be around Rs. 427 crore, and has hence considered this surplus to compute the revenue gap for FY 2006-07. The same will be adjusted once the actual amounts are known, at the time of Annual Performance Review for FY 2008-09.

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- 5. For FY 2007-08, MSEDCL estimated the provisional truing up requirement as Rs. 403 crore, on the basis of the projected expenses and revenue for the year. The Commission's analysis of the truing up for FY 2007-08 shows that MSEDCL has a surplus of Rs. 756 crore in FY 2007-08, which has been adjusted against the approved revenue requirement for FY 2008-09. The major heads on which the Commission has considered different levels of expenditure and revenue for FY 2007-08 are given below:
 - a. The Commission has considered the actual power purchase quantum and cost for the first eleven months of the year, i.e., April 2007 to February 2008, and estimated the quantum of power purchase and cost for the month of March 2008 on pro-rata basis. The Commission has considered both, costly and non-costly sources of power purchase, while determining the revised ARR and truing up requirement.
 - b. One-fifth of the employee expense of Rs. 440 crore on account of spreading over of the leave encashment impact has been considered in the ARR of FY 2007-08.
 - c. The actual revenue from sale of electricity to different consumer categories for the period April 2007 to February 2008 has been pro-rated to determine the actual revenue earned by MSEDCL.
 - d. The subsidy provided by the Government of Maharashtra to the extent of Rs. 1829 crore (of which Rs. 123 crore on account of sales for FY 2007-08 is yet to be paid) has been added to the revenue from sale of electricity.
 - e. As in FY 2006-07, MSEDCL has also over-recovered ASC to the extent of around Rs. 1005 crore in FY 2007-08 (from April to December 2007, as per MSEDCL submission yet to be vetted by the Commission), which has to be returned to the consumers on a one-to-one basis, after setting off the base energy charges as discussed earlier in this Order. The exact additional amount available to MSEDCL for setting off against the base ARR will be known only after MSEDCL undertakes the exercise of refund of excess ASC on one-to-one basis, which has to be done for FY 2007-08 at the earliest. For the purpose of this Order, while truing up the expenses and revenue for FY 2007-08, the Commission has estimated that the additional amount available to MSEDCL for setting off against the base ARR of FY 2007-08 is around Rs. 768 crore, and has hence considered this surplus to compute the revenue gap for FY 2007-08. The same will be adjusted once the actual amounts are known, at the time of Annual Performance Review for FY 2008-09.
- 6. The revised Energy Balance for FY 2007-08 has been drawn up on the basis of the actual category-wise sales for the period from April 2007 to February 2008, and

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- the actual power purchase from different sources, which has been pro-rated for the entire year. The total sales considered by the Commission for FY 2007-08 based on the above approach is 53958 MU, as compared to 54358 MU projected by MSEDCL in the APR Petition.
- 7. For FY 2008-09, the Commission has projected the sales at 65966 MU, as compared to MSEDCL's projection of 63775 MU. The Commission has considered the consumption of un-metered agricultural consumers as 6493 MU as submitted by MSEDCL for FY 2007-08, since no new connections are being given on un-metered basis.
- 8. The surplus energy available based on the power procurement plan has been apportioned across all LT categories, in proportion to the sales of each category, as the surplus energy can be used to reduce the load shedding to these categories.
- 9. The distribution loss level in FY 2006-07 has been now estimated as 30.20%, as compared to 30.5% considered by MSEDCL. Hence, this forms the opening loss level for the MYT Control Period from FY 2007-08 to FY 2009-10, wherein MSEDCL has been directed 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.
- 10. Accordingly, the energy balance for FY 2007-08 has been drawn by considering the distribution loss of 26.20%, as compared to 26.5% considered by MSEDCL in its APR Petition. Similarly, the energy balance for FY 2008-09 has been drawn by considering the distribution loss of 22.20%, as compared to 22.5% considered by MSEDCL in its APR Petition. The sharing of gains and losses on account of controllable factors on the aspect of distribution losses will be computed for FY 2007-08 based on the actual losses at the end of the year, in accordance with the Commission's Tariff Regulations.
- 11. 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 loss. 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.

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- 12. For FY 2008-09, the Commission has estimated the total quantum of gross power purchase at 90206 MU, as compared to MSEDCL's projection of 87886 MU. The quantum of power purchase estimated by the Commission at transmission periphery after deducting inter-state transmission losses is 89109 MU as against MSEDCL's projection of 86475 MU.
- 13. The cost of power purchase from MSPGCL in FY 2008-09, has been considered in consonance with the Commission's Order on ARR and Tariff for MSPGCL stations for FY 2008-09, in Case No. 71 of 2007 issued on May 31, 2008. The quantum of power purchase from other sources has been determined mainly on the basis of CEA target and price for purchase of power from other sources has been considered based on approved Fixed Charges and prevailing rates of energy charges.
- 14. The transmission charges payable by MSEDCL have been considered in accordance with the Commission's Order on transmission tariff in Case No. 104 of 2007 issued on May 31, 2008.
- 15. The Commission has approved the Operation & Maintenance expenses comprising employee expenses, Administration & General (A&G) expenses, and Repair & Maintenance (R&M) expenses, for FY 2007-08 and FY 2008-09 by considering a normative increase linked to inflation indices, over the expenditure approved after truing up for FY 2006-07.
- 16. The Commission has considered the capital expenditure and capitalisation for FY 2006-07, FY 2007-08 and FY 2008-09, on the basis of the schemes approved by the Commission till date. In this context, though the Commission had asked MSEDCL to submit the actual status of capital expenditure and capitalisation in FY 2007-08, MSEDCL has not submitted the same till date. Given the ambitious target of capital expenditure that MSEDCL has set itself, MSEDCL's seeming inability to track scheme-wise capital expenditure is not too comforting. Since the Commission has no additional data on which to modify the projections of capital expenditure and capitalisation considered in the MYT Order, the Commission has retained the same in this Order also. The same will be modified at the time of final truing up for FY 2007-08 only if MSEDCL submits the necessary scheme-wise details of capital expenditure and capitalisation and project status and costs vis-à-vis the Commission's approval.
- 17. The capital related expense heads, viz., interest, depreciation and Return on Equity (RoE) have been determined in accordance with the Regulations, on the approved capital expenditure and capitalisation.

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- 18. The interest on working capital requirement and consumer security deposit has been computed in accordance with the MERC Tariff Regulations.
- 19. The Commission has considered provision for bad debts at 1.5% of billed revenue, in accordance with previous trend.
- 20. Since no income tax has actually been paid in FY 2007-08, the same has been considered as Nil under the provisional truing up. For FY 2008-09, the Income Tax has been retained at the levels projected in the MYT Order.
- 21. The ARR for FY 2007-08 and FY 2008-09 includes the expenditure on non-costly power purchase as well as costly power purchase, since in this Order, the Commission has not considered the applicability of the Additional Supply Charges (ASC), due to the following reasons:
 - a. The ASC was introduced in the context of the increasing need to procure additional costly power in order to mitigate load shedding, and hence, the non-costly power (primarily comprising power sourced from MSPGCL and Central Sector) was equitably allocated to all regions and categories, while the costly power was allocated to certain categories, who were benefiting from reduction in load shedding, and the expenditure on the procurement of costly power was recovered through ASC.
 - b. However, it has been observed that the actual procurement of costly power by MSEDCL has been much lower than that estimated by the Commission in the Orders for FY 2006-07 and FY 2007-08, whereas ASC is recovered from the consumers every month in accordance with the ASC matrix, leading to a situation where significant amount of over-recovery of ASC is taking place.
 - c. Since costly power is not being procured to the extent envisaged, it means that the requirement of the consumers is being met through procurement of non-costly power itself, and the rationale for treating certain power as costly and ear-marking the same for certain categories is no longer necessary.
 - d. MSEDCL has also not refunded the ASC over-recovery till date, even for the period October 2006 to March 2007, as confirmed in MSEDCL's reply to a specific query from the Commission in this regard.
 - e. In its APR Petition, MSEDCL has requested that RGPPL should be considered under costly power, even though the projected power procurement rate was around Rs. 3.60 per kWh, since in case RGPPL power was not procured, it would result in significant increase in the load shedding to different categories and regions.
 - f. However, the Commission does not find any merit in MSEDCL's contentions in this regard, since

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- i. RGPPL power is primarily intended for the State of Maharashtra on a long-term basis. Any such source of power, which is being procured under a long-term PPA, has to be considered as one of the pool sources, to be shared equitably amongst all the consumers in the State, rather than be earmarked for a select few consumers and regions.
- ii. The argument that load shedding will increase if power procurement from RGPPL is not undertaken, though true, can be extended to procurement from any source, including MSPGCL or CGS. Moreover, the power procurement from RGPPL is not being denied, it is only the mechanism of recovery of the cost that is being modified.
- iii. The rate projected by MSEDCL for power procurement from RGPPL is Rs. 3.6 per kWh, while the Commission has considered the weighted average rate as Rs. 3.40 per kWh based on the higher power purchase considered on the basis of the CEA targets. While introducing the concept of ASC, the Commission has been considering all power sources costing above Rs. 4 per kWh as costly power. While there may be no economic rationale for considering a particular level as the cutoff for such purposes, having established the same, it will be improper to shift the cut-off so that a particular source qualifies as costly power. In the MYT Order also, the Commission bifurcated power procurement from RGPPL into two parts, viz. for the seven month period from April to November, RGPPL power was treated as a costly source, since the rate of power procurement was expected to be around R. 5.01 per kWh, while for the remaining part of the year, the rate of procurement was expected to be around Rs. 3.05 per kWh, and hence, this quantum was considered as non-costly power.
- g. Recently, the Franchisee/Interim Franchisee model has been approved for places like Baramati and Thane, Mulund, Bhandup and Navi Mumbai, wherein additional costly power required to mitigate load shedding in that region is procured by MSEDCL and there is a tri-partite Agreement between MSEDCL, the power supplier and the Interim Franchisee, with the additional Reliability Charges payable by the consumers of the respective region being approved by the Commission through a separate process, on the basis of Petition to be filed by MSEDCL, as the distribution licensee. This also reduces the need for continuing with the ASC model.
- h. It should be noted that there is no loss to MSEDCL in the context of RGPPL being considered as non-costly power and the ASC matrix being removed,

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- since MSEDCL has been given full recovery of all its power purchase costs, including that from RGPPL power.
- 22. The ARR for FY 2008-09 to be recovered through retail sales of electricity has been determined as Rs. 24785 crore, as compared to Rs. 25253 crore projected by MSEDCL, by considering both costly as well as non-costly sources of power purchase in the base ARR itself, in view of the above explanation for removing applicability of ASC. The ARR is lower than that projected by MSEDCL, despite the Commission considering the increase in the transmission charges payable to the InSTS and the higher charges payable to MSPGCL, which had not been considered by MSEDCL in its Petition.
- 23. The revenue from existing tariffs for projected sales in FY 2008-09 has been determined as Rs. 22348 crore, as compared to Rs. 24471 crore estimated by MSEDCL. This revenue includes the annual standby charges of Rs. 396 crore payable by Mumbai licensees, viz., REL, BEST and TPC, for the standby facility provided by MSEDCL. The difference is primarily on account of the fact that MSEDCL has considered revenue from ASC charges, which are higher than the base energy charges, whereas the Commission has considered the revenue from the entire sales at the base tariffs.
- 24. The resultant revenue gap for FY 2008-09, thus works out to Rs. 2437 crore, as compared to Rs. 782 crore projected by MSEDCL. This is primarily due to MSEDCL not considering the expense on costly power purchase and the revenue through ASC as a part of its ARR, whereas the Commission has considered all the power purchase expenses and the recovery through base energy charges, to determine the revenue gap.
- 25. After considering the surplus of Rs. 469 crore in FY 2001-02, surplus of Rs. 214 crore in FY 2006-07, surplus of Rs. 756 crore in FY 2007-08, and adding the pending claim of Rs. 11.6 crore on account of interest on FAC, the net revenue gap for FY 2008-09 works out to Rs. 1010 crore, as compared to MSEDCL's Petition for Rs. 3318 crore, resulting in an average increase in total revenue requirement by around 4.5%.
- 26. The Commission, in line with its directions in the Order dated April 2, 2008 in Case No.s 47 and 92 of 2007 on the Review Petition filed by MSEDCL on the issue of refund of Regulatory Liability Charges (RLC), has considered a refund of RLC of Rs. 500 crore in FY 2008-09 to be refunded to the specified consumer categories, out of the total amount of around Rs. 3227 crore collected by MSEDCL through RLC over the period from December 2003 to September 2006, which were like a loan given by these subsidizing categories to help MSEDCL tide over the financial crisis due to its heavy distribution losses. This is only a

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token amount, amounting to around 16% of the RLC collected from the selected consumer categories. It is expected that with progressive improvement of MSEDCL's operations in future years, the balance amount will be refunded in the near short-term. This refund amount of Rs. 500 crore has been added to the ARR of MSEDCL for FY 2008-09, and will thus be recovered from all the consumers of MSEDCL.

- 27. The net revenue gap for FY 2008-09 thus works out to Rs. 1510 crore, as compared to MSEDCL's Petition for Rs. 3318 crore, resulting in an average increase in total revenue requirement by around 6.76%, as compared to MSEDCL's Petition for average tariff increase of 19.3%.
- 28. 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, and also to consolidate the movement towards uniform tariff categorisation throughout the State of Maharashtra.
- 29. As the severe load shedding of 12 to 15 hours for agriculture category is likely to continue to prevail for some more time, the Commission has decided to retain the agriculture tariffs at the existing level. The tariff for HT Agriculture consumers has also been retained at the existing levels.
- 30. MSEDCL should strive to ensure 100% metering of all consumption, including agricultural consumption, if not at the individual level, then at least at the feeder level and DTC level. In order to incentivise consumers to adopt metering, the metered tariffs have been specified lower than the effective flat rate tariffs. Further, when such metered consumers participate in DSM programmes, then all such consumers who shift to metered tariffs will be entitled to a rebate of 10% in the energy bills to be given by MSEDCL.
- 31. The Commission has observed that the tariff categorisation and applicability of tariffs is different across different licensees in the State, which is not appropriate. The differences exist because of historical reasons and differences in management policies and approach across licensees. However, within one State, the consumer categorisation and applicability of tariffs should not be significantly different, and the Commission has attempted to achieve this objective in this Order and other Orders for the distribution licensees in the State. 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.

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- 32. The existing Fuel Adjustment Cost (FAC) Charge has been brought to zero, on account of the adoption of the existing fuel costs for projection of the fuel expenses. In case of any variation in the fuel prices with respect to these levels, 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. The FAC will be charged on a monthly basis, and the details of the computation and recovery from the same will have to be submitted to the Commission for post-facto, on a quarterly basis.
- 33. 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.
- 34. The applicability of the BPL category tariffs has been modified slightly such that BPL category will be available only to such residential consumers who have a sanctioned load of upto and less than 1 kW, and have consumed less than 360 units per annum in the previous financial year. The eligibility criteria has thus, been modified from a monthly limit of 30 units to an annual limit of 360 units, so that it leaves some flexibility in consumption with the BPL consumer. 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-1 residential category. Once a consumer is classified under the LT-1 category, then he cannot be classified under BPL category.
- 35. The Commission has continued with the practice of charging higher tariffs for residential consumers having monthly consumption above 300 units per month and above 500 units per month, since, the Commission feels that in the residential category, such consumption should be classified as luxurious use, and an

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- economic signal in terms of higher tariff has to be given to such consumers to encourage them to make efforts for energy conservation.
- 36. In view of the ATE's decision in this regard, the Commission has done away with LT-IX category, the separate consumer categorisation for shopping malls and multiplexes,. All these consumers will henceforth, be classified under LT-2 commercial category, as was being done earlier. Further, three new sub-categories have been created under LT-2 commercial category on the basis of sanctioned load, viz., 0 to 20 kW, 21 kW to 50 kW, and above 50 kW sanctioned load. The Commission has determined the tariffs for these two sub-categories at higher levels.
- 37. When the ASC was being charged earlier, a lower base energy charge was applicable for the HT Continuous industry as compared to HT non-continuous industry, which was off-set by the higher ASC percentage charged to HT continuous industry. However, the ASC has now been removed. Since the continuous process industries are getting supply on a continuous basis, and are not subjected to load shedding, including staggering day, the tariff for HT continuous industry has been specified slightly higher than that applicable for HT non-continuous industry.
- 38. The Commission has created a new category, viz., HT-II Commercial, to cater to all commercial category consumers availing supply at HT voltages, and currently classified under the existing HT-I Industrial or LT-IX (multiplexes and shopping malls). This category will include Hospitals getting supply at HT voltages, irrespective of whether they are charitable, trust, Government owned and operated, etc. The tariff for such HT-II commercial category consumers has been determined higher than the tariff applicable for HT-I industrial, in line with the philosophy adopted for LT commercial consumers. Such categorisation already exists in other licence areas in the State, and is hence, being extended to MSEDCL licence area also.
- 39. The Commission has created a new category, viz., LT IX, which will include all crematoriums and cremation and burial grounds, irrespective of whether these are electric crematoriums, or otherwise, and the tariffs have been specified at lower levels. This is in line with the other distribution licensees in the State, where this category exists. However, this lower tariff 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.

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- 40. The Commission has ensured that the average billing rate for HT Group Housing societies is lower than the average billing rate for LT residential category, since the Group Housing societies take supply at single point and supply it to the individual residences using their own network.
- 41. MSEDCL had sought significant reduction in the tariffs applicable to LT and HT Public Water Works (PWW). The Commission has reduced the tariff for LT PWW by around 2.25% and by 8.5% for HT PWW consumers, since these are Public Utilities and benefit the society at large, while at the same time, the Commission cannot increase the cross-subsidy. If the State Government wishes to offer additional subsidy to this category, it may do so by compensating the MSEDCL for the resultant loss in revenue.
- 42. MSEDCL had proposed to reduce the tariff to MPECS by 50%. Keeping in view the fact that MPECS is an embedded distribution licensee within MSEDCL licence area, and has a predominantly agricultural mix of consumers, and is also subjected to load shedding in accordance with the prevailing load shedding protocol for that region, the Commission has reduced the tariff applicable to MPECS, though not to the extent proposed by MSEDCL. Further, in accordance with the Judgment of the Honourable Appellate Tribunal for Electricity (ATE) on the Appeal filed by MPECS against the Commission's Tariff Order for MPECS, the Commission rules that MSEDCL should install meters capable of recording the Simultaneous Maximum Demand (SMD) at all the energy interchange points with MPECS, and levy demand charges on MPECS on the basis of the recorded SMD, rather than on the arithmetic summation of the demand at all the 22 energy interchange points.
- 43. MSEDCL had proposed to introduce two new sub-categories within LT V industrial category, viz., (a) Power looms, and (b) Flour mills below 10 HP sanctioned load, and proposed a lower tariff for these two new sub-categories. The Commission has not created these two sub-categories, and has retained them under the LT V industrial category. However, the Commission has ensured that there is no tariff increase for the sub-category 0 to 20 kW, thereby protecting the smaller consumers from a tariff shock.
- 44. The Time of Day (ToD) tariffs will be applicable compulsorily to most HT consumer categories, including the newly created HT II commercial category, but excluding HT III Railways, Mula Pravara Electric Co-operative Society, which is a licensee, HT Agriculture and HT VI Group Housing Societies. ToD tariffs will also be compulsorily applicable to LT V industrial category above 20 kW sanctioned load, as well as optionally available to LT V category consumers

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- having sanctioned load below 20 kW, who have TOD meters. The TOD tariffs have been retained at existing levels.
- 45. 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.
- 46. 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.
- 47. In line with the Commission's ruling in the MYT Order, since MSEDCL is yet to achieve 100% MD metering for LT V industrial consumers above 20 kW (around 97% completion has been indicated by MSEDCL till date), the MD tariffs for LT V industrial consumers will not be made effective. Till the MD meters are installed, MSEDCL will be allowed to charge only the earlier HP based tariffs, though the revenue has been assessed based on MD based tariffs.
- 48. The Commission reiterates that that HT-V Residential would be applicable only to the Group Housing Societies. MSEDCL had been directed to ensure metering arrangements so that consumers currently classified under HT-V Commercial Category, and requiring a single point supply, will have to either operate through a franchise route or take individual connections under relevant category. MSEDCL is directed to ensure compliance with this directive immediately.
- 49. The Commission has directed MSEDCL to adopt Demand Side Management Measures (DSM) and reduce the demand for power in its license area. The cost of such DSM projects shall be allowed by the Commission as a part of the Annual Revenue Requirement of MSEDCL, which would be more than offset by the savings in power purchase cost due to reduction in demand.
- 50. The rebates/incentives and disincentives have been retained at the existing levels.
- 51. In line with the MYT Order, 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.
- 52. 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 likely that the actual revenue earned by MSEDCL may be higher than that considered by the Commission, on account of tariff changes such as introduction of demand charges

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for LT commercial category, as well as creation of the new HT-II Commercial category. Any additional revenue/shortfall in revenue due to the impact not being assessed at this stage will be trued up at the time of final truing up for FY 2008-09.

- 53. The Commission approves MSEDCL's proposal for modification to the load shedding protocol, with the following basic changes, viz.,
 - a. Introduction of two more Groups taking the number of Groups identified on the basis of distribution losses and collection efficiency, to six.
 - b. Merger of the Categorisation of 'Urban and Industrial Agglomerations' and 'Other Regions'
- 54. The revised groups and classifications, created on the basis of the distribution losses and collection efficiency are given below:

Group	Weighted average distribution loss and collection efficiency level (DCL 70/30)								
	Other Region	Ag. dominated							
A	0% to 18%	0% to 21%							
В	>18% to 26%	>21% to 29%							
С	>26% to 34%	>29% to 37%							
D	>34% to 42%	>37% to 45%							
E	>42% to 50%	>45% to 53%							
F	Above 50%	Above 53%							

55. The approved ceiling hours of load shedding for different divisions grouped under the above load shedding matrix, for a demand-supply gap of around 4500 MW, are given below:

Group	Other	Agriculture
	Regions	dominated regions
A	2.75	10.00
В	3.50	10.50
С	4.25	11.00
D	5.00	11.50
Е	5.75	12.00
F	6.50	12.00

56. The modification to the load shedding protocol is in public interest, as the remaining differentiation between urban and other regions has been eliminated,

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while at the same time, rewarding regions with lower distribution losses and higher collection efficiency, with reduced load shedding. The above load shedding matrix only indicates the ceiling hours of load shedding, and the actual number of hours of load shedding will depend on the demand-supply balance, and the timing of load shedding in different regions has to be formulated by MSEDCL, keeping in mind the local requirements. Moreover, due to the above changes, divisions that were hitherto performing well on the aspect of distribution loss and collection efficiency will have either the existing level of load shedding or benefit from reduced load shedding, despite the merger of Urban and Industrial Agglomerations with Other Regions.

- 57. MSEDCL should strive to reduce the load shedding to different regions and categories, by procuring the required quantum of power at reasonable rates through long-term power purchase agreements.
- 58. The Commission has determined the wheeling charges for eligible open access consumers for each voltage level based on the voltage-wise asset base and capacity levels at each voltage, as submitted by MSEDCL, with certain assumptions. The ARR of MSEDCL has been segregated between wires business and retail supply business in accordance with the principles adopted by the Commission in the MYT Order. Consumers connected directly to the transmission network would not be required to pay the wheeling charges. Open access consumers will pay the wheeling charges and the wheeling loss in kind linked to distribution loss at respective voltage level.
- 59. 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.
- 60. The Commission will undertake the Annual Review of MSEDCL's performance for FY 2008-09 during the last quarter of FY 2008-09. MSEDCL is directed to submit its Petition for Annual Review of its performance during the first half of FY 2008-09, as well as truing up of revenue and expenses for FY 2007-08, with detailed reasons for deviation in performance, latest by November 30, 2008.

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Table 1: Aggregate Revenue Requirement for FY 2006-07, FY 2007-08 and FY 2008-09 (Rs. Crore)

	Particulars	Previous Year FY 07			FY 2007-08			FY 2008-09		
Sl.		Order	Audited	Approved after truing up	MYT Order	Revised Estimate by MSEDCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSEDCL	Approved
1	Power Purchase Expenses	13632	14925	14925	16899	16597	14963		19743	19403
2	Operation & Maintenance Expenses									
2.1	Employee Expenses	1445	1926	1593	1572	1644	1727	1657	1791	1874
2.2	Administration & General Expenses	108	148	148	116	172	156	122	235	181
2.3	Repair & Maintenance Expenses	340	416	416	359	447	436	378	481	456
3	Depreciation, including advance against depreciation	352	608	366	389	417	384	435	463	428
4	Interest on Long-term Loan Capital	116	314	154	261	422	237	323	679	347
5	Interest on Working Capital, consumer security deposits and Finance Charges	140	185	182	285	255	252	285	274	271
6	Provision for Bad Debts	207	299	283	267	325	267	276	269	335
7	Other Expenses	41	44	44	2	5	5	2	5	5
8	Income Tax				86	86	0	86	86	86
9	Transmission Charges paid to Transmission Licensee	1265	1352	1352	1460	1471	1460		1472	1786
10	SLDC Charges	16								
11	Contribution to contingency reserves	49.295	50	47	50	53	52	56	63	29

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		Previous Year FY 07			FY 2007-08			FY 2008-09		
SI.	Particulars	Order	Audited	Approved after truing up	MYT Order	Revised Estimate by MSEDCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSEDCL	Approved
12	Adjustment for profit/loss on account controllable/uncontrollable factors									
13	Incentives/Discounts	166	72	72	66	75	75	72	79	79
14	Interest on Working Capital required on account of shortfall of Collection Efficiency					67	0		53	0
15	Total Revenue Expenditure	17877	20338	19582	21812	22036	20013	3692	25692	25278
16	Return on Equity Capital	390.88	518	518	409	563	555	430	635	581
17	Aggregate Revenue Requirement	18268	20856	20100	19939	22599	20568	4122	26327	25860
18										
19	Less: Non Tariff Income	734	887	887	953	904	904	1072	1074	1074
20	Surplus of previous years - FY 2004-05	137	137	137						
21	Surplus of previous years - FY 2005-06	227								
22	Aggregate Revenue Requirement from Retail Tariff	17170	19832	19076	18986	21695	19664	3050	25253	24785

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Table 2: Revenue Gap in FY 2006-07, FY 2007-08 and FY 2008-09 (Rs. Crore)

	Particulars	Previous Year FY 07			FY 2007-08			FY 2008-09		
SI.		Order	Audited	Approved after truing up	MYT Order	Revised Estimate by MSEDCL	Approved after provisional truing up	MYT Order	Revised Estimate by MSEDCL	Approved
23	Revenue from existing tariff	17170	18863	18863	18205	21292	17821.97		24471	22348
24	Subsidy from Government of Maharashtra					0	1829.23			
25	Part of ASC over-recovery set off against non-costly power			427		0	768.08			
26	Total Revenue	17170	18863	19290	18205	21292	20419		24471	22348
27	Revenue Gap for the year	0	969	-214	781	403	-756		782	2437

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Table 3: Total Revenue Gap to be recovered through sale of electricity in FY 2008-09 (Rs. Crore)

Particulars	MSEDCL	Commission
Truing up for FY 2001-02 - Regulatory Asset	1064.6	-468.82
Truing up for FY 2006-07	969	-214
Provisional Truing up for FY 2007-08	403	-756
Revenue Gap for FY 2008-09	782	2437
Additional claim due to ATE Order	88	0
Pending Claim - FAC interest	11.59	11.59
Total Revenue Gap to be recovered through tariffs in FY 2008-09	3318	1010
Average tariff increase	19.36%	4.52%
Additional revenue requirement due to refund of Regulatory Liability Charges		500
Effective Revenue Gap to be recovered through tariffs in FY 2008-09		1510
Average tariff increase		6.76%

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Table 4: Summary of LT Tariff Effective from June 1, 2008

Consumer Category	Demand Charges	Energy	
	(Rs/KVA/month) or(Rs/HP/month) or (Rs/	Charges	
	connection/month)	(Paise/kWh)	
LT I - Domestic			
Consumption less than 30	Rs 3 per service connection	40	
Units Per Month (BPL)			
Consumption more than			
30 Units Per Month			
0-100 Units	Single Phase: Rs. 30 per service connection;	205	
101- 300 Units	Three Phase: Rs. 100 per service connection;	390	
301-500 Units	Additional Fixed charge of Rs. 100 per 10 kW load	530	
Above 500 units (Only	or part thereof above 10 kW load shall be payable.	620	
balance Units)			
LT II - Non Domestic			
0-20 kW	Rs. 150 per connection per month	340	
>20 - 50 kW	Rs. 150 per kVA per month	550	
> 50 kW	Rs. 150 per kVA per month	750	
LT III - Public Water W	orks		
0- 20 KW	Rs 40 per kVA per month	125	
>20-40 KW	Rs 50 per kVA per month	175	
>40-50 KW	Rs 70 per kVA per month	250	
LT IV - Agriculture			
Un-metered Tariff			
Category 1 Zones*	Rs. 241 per kW per month	0	
	(Rs 180 per HP per month)		
Category 2 Zones#	Rs 201 per kW per month	0	
	(Rs. 150 per HP per month)		
Metered Tariff (including	Rs 20 per kW per month	110	
Poultry Farms)	(Rs 15 per HP per month)		
LT V - Industrial		•	

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Consumer Category	Demand Charges	Energy	
	(Rs/KVA/month) or(Rs/HP/month) or (Rs/	Charges	
	connection/month)	(Paise/kWh)	
0-20 kW (upto and	Rs. 150 per connection per month	300	
including 27 HP)			
Above 20 kW (above 27	Rs. 100 per kVA per month for 65% of maximum	450	
HP)	demand or 40% of contract demand, whichever is		
	higher		
	Rs. 60 per HP per month for 50% of sanctioned		
	load, till such time MD meters are installed for all		
	consumers		
TOD Tariff (in addition t	o base tariff, after installation of MD meter)		
2200 hrs – 0600 hrs	-	(85)	
0600 hrs – 0900 hrs		0	
0900 hrs – 1200 hrs		80	
1200 hrs – 1800 hrs		0	
1800 hrs – 2200 hrs		110	
LT VI - Street Light			
Grampanchayat, A, B &	Rs 30 per KW per month	240	
C Class Municipal			
Council			
Municipal Corporation		290	
Areas			
LT VII - Temporary			
Temporary Connections	Rs 250 per connection per occasion of supply	1200	
-Other Purpose			
Temporary Connections -	Rs 200 per connection per occasion of supply	200	
Religious			
LTVIII - Advertisement	Rs 400 per connection	1400	
& Hoardings			
LT IX – Crematoriums	Rs 200 per connection	200	
& Burial Grounds			

*Category 1 Zones (with consumption norm above 1318 hours/HP/year)							
1	Bhandup (U)	2	Pune	3	Nashik		

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#Ca	#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. FAC will be determined every month based on the FAC Formula approved by the Commission.
- 2. Billing Demand for LT V categories and LT II 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

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Table 5: Summary of HT Tariff Effective from June 1, 2008

Consumer Category	Demand Charges	Energy Charge			
	(Rs/kVA/month)	(Paise/kWh)			
HT I - Industry					
Continuous Industry (on express	150	400			
feeder)					
Non-continuous Industry (not on	150	395			
express feeder)					
Seasonal Industry	150	500			
HT II - Commercial					
HT – III - Railway Traction	0	470			
HT IV - Public Water Works					
Express Feeders	150	300			
Non- Express Feeders	150	320			
TOD Tariff (for HT I, HT I A, HT	T II & HT IV)				
2200 hrs – 0600 hrs		(85)			
0600 hrs – 0900 hrs		0			
0900 hrs – 1200 hrs		80			
1200 hrs – 1800 hrs		0			
1800 hrs – 2200 hrs		110			
HT V- Agriculture	25	160			
HT- VI					
Group Housing Society	125	300			
Commercial Complex	125	525			
HT VII - Mula Pravara	100	200			
Electric Co-op Society					

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>HT Industries & HT Water Works (HT I & HT IV)</u>

 Monthly Billing Demand will be the higher of the following:

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- 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. HT Seasonal Category (HT I A)

During Declared Season Monthly Billing Demand will be the higher of the following:

- Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
- ii. 75% of the Contract Demand
- iii. 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
- 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.

Incentives and Disincentives:

Power Factor Calculation

Wherever, the average power factor measurement is not possible through already installed meter, the following method for calculating the average power factor during the billing period shall be adopted-

Average Power Factor
$$= \frac{Total(kWH)}{Total(kVAh)}$$

Wherein the kVAh is the square root of the summation of the squares of kWh and RkVAh

<u>Power Factor Incentive</u> (Applicable for all HT categories, except HTP III with specific dispensation, and LT III, LT V and LT IX categories)

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Whenever the average power factor is more than 0.95, an incentive shall be given at the rate of 1% (one percent) of the amount of the monthly bill including energy charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties for every 1% (one percent) improvement in the power factor (PF) above 0.95. For PF of 0.99, the effective incentive will amount to 5% (five percent) reduction in the monthly bill and for unity PF, the effective incentive will amount to 7% (seven percent) reduction in the monthly bill.

<u>Power Factor Penalty</u> (Applicable for all HT categories, except HTP III with specific dispensation, and LT III, LT V and LT IX categories)

Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of 2% (two percent) of the amount of the monthly bill including energy charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties for the first 1% (one percent) fall in the power factor below 0.9, beyond which the penal charges shall be levied at the rate of 1% (one percent) for each percentage point fall in the PF below 0.89.

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.

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-

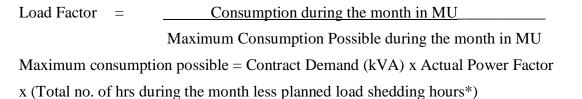
Sr. No.	Delay in Payment (months)	Interest Rate p.a. (%)
1	Payment after due date upto 3 months (0 - 3)	12%
2	Payment made after 3 months and before 6 months (3 - 6)	15%
3	Payment made after 6 months (> 6)	18%

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Load Factor Incentive

The Commission has retained the Load factor incentive for consumers having Load Factor above 75% based on contract demand. 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 category only. Further, the load factor rebate will be available only if the consumer has no arrears with the MSEDCL, and payment is made within seven days from the date of the bill or within 5 days of the receipt of the bill, whichever is later. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by the MSEDCL, and the same is being made as scheduled. The 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:



* - 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).

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Table: Summary of Wheeling Charges and Wheeling Losses for eligible Open Access Consumers Effective from June 1, 2008

Voltage level	Rs/kW/Month	Distribution Loss (%)
33 kV	20	6%
22 kV & 11 kV	110	9%
LT	191	14%

The cross-subsidy surcharge for eligible open access consumers has been specified as zero.

1.7 Errata and Corrigendum dated June 5, 2008

Subsequent to the issue of the Order, the Commission observed certain errors and gaps in the Operative Order. Therefore, the Commission through the Errata and Corrigendum rectified the said errors and gaps as under:

1. Para 34 of the Operative Order states,

"The applicability of the BPL category tariffs has been modified slightly such that BPL category will be available only to such residential consumers who have a sanctioned load of upto and less than 1 kW, and have consumed less than 360 units per annum in the previous financial year..." (emphasis added)

The above clause should be read as given below:

"The applicability of the BPL category tariffs has been modified slightly such that BPL category will be available only to such residential consumers who have a sanctioned load of upto and <u>less than 0.1 kW</u>, and have consumed less than 360 units per annum in the previous financial year..."

2. Para 35 of the Operative Order states,

"The Commission has continued with the practice of charging higher tariffs for residential consumers having monthly consumption above 300 units per month and above 500 units per month, since, the Commission feels that in the residential category, such consumption should be classified as luxurious use, and an economic

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signal in terms of higher tariff has to be given to such consumers to encourage them to make efforts for energy conservation."

At the end of this paragraph, the following sentence should be added,

"The Commission has modified the applicability of tariff to telephone booths operated by handicapped persons and such booths will henceforth, be charged as per tariffs applicable to the LT-1 residential category"

3. Para 37 of the Operative Order states,

"When the ASC was being charged earlier, a lower base energy charge was applicable for the HT Continuous industry as compared to HT non-continuous industry, which was off-set by the higher ASC percentage charged to HT continuous industry. However, the ASC has now been removed. Since the continuous process industries are getting supply on a continuous basis, and are not subjected to load shedding, including staggering day, the tariff for HT continuous industry has been specified slightly higher than that applicable for HT non-continuous industry."

At the end of this paragraph, the following sentence should be added,

"Similarly, the tariff for HT IV – PWW consumers connected through express feeders has been specified slightly higher than that applicable for HT IV – PWW consumers getting supply through non-express feeders".

4. Para 46 of the Operative Order states,

"The Billing Demand definition has been retained at the existing levels, i.e.,

Monthly Billing Demand will be the higher of the following:

- (d) Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;
- (e) 75% of the highest billing demand/Contract Demand, whichever is lower, recorded during the preceding eleven months;
- (f) 50% of the Contract Demand." (emphasis added)

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The above clause (b) should be read as "75% of the highest billing demand recorded during the preceding eleven months, subject to the limit of Contract Demand".

- 5. In Table 4 of the Operative Order, the following changes should be made:
 - a. The heading of the second column should be read as "Fixed Charges/Demand Charges" instead of "Demand Charges"
 - b. The tariff for the first sub-category under LT-2 commercial category, viz., 0-20 kW, has two further sub-categories based on consumption and should be read as under:

Consumer Category	Fixed Charges/Demand Charges (Rs/KVA/month) or(Rs/HP/month) or (Rs/ connection/month)	Energy Charges (Paise/kWh)
LT II - Non Domestic		
0-20 kW		
0 to 200 units per month	Rs. 150 per connection per month	340
Above 200 units per month	Rs. 150 per connection per month	525
(only balance consumption)		

- c. The fixed charges for LT IX Crematorium and Burial Grounds, should be read as "Rs 200 per connection per month" instead of "Rs 200 per connection per occasion of supply"
- d. The applicability of the TOD tariff for LT category should be read as "TOD Tariff (in addition to base tariff, after installation of MD meter) compulsorily applicable for LT V Industrial, LT II Commercial for sanctioned load above 20 kW, and optionally available to LT II Commercial for sanctioned load below 20 kW"
- 6. In Table 5 of the Operative Order, the following changes should be made:
 - e.For **HT I Industry**, the energy charges for **Continuous Industry** (on express feeder) should be read as "**430 paise/kWh**" instead of "400 paise/kWh".
 - f. For **HT II Commercial Category**, the demand charges and energy charges were inadvertently not specified, and should be read as follows:

i. Demand Charges : Rs. 150 per kVA per month

ii. Energy Charges : 700 paise/kWh

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Consumer Category	egory Demand Charges (Rs/KVA/month)			
HT IV - Public Water Works	5			
Express Feeders	1:	50	310	
Non- Express Feeders	1:	50	300	

g. For HT IV Public Water Works category, the tariffs should be read as under:

h. The tariff for HT temporary consumers will be the same as that applicable for LT temporary consumers, viz.,

i. Fixed Charges : Rs. 250 per connection per

occasion of supply

ii. Energy Charges : 1200 paise/kWh

7. Note 3 after Table 5 states,

"HT Industries & HT Water Works (HT I & HT IV)

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 preceding eleven months
- vi. 50% of the Contract Demand."

Clause (ii) above should be read as "75% of the highest billing demand recorded during the preceding eleven months, subject to the limit of Contract Demand"

8. On Page 28 of the Operative Order, the eligibility for receiving prompt payment discount should be read as "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", instead of "A prompt payment discount of one percent on the monthly bill (excluding Taxes and Duties) shall be

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available to the consumers <u>if the bills are paid within a period of 7 days from the date</u> of issue of the bill".

1.8 Errata in Operative Order

1. Para 43 of the Operative Order states,

"The Time of Day (ToD) tariffs will be applicable compulsorily to most HT consumer categories, including the newly created HT II commercial category, but excluding HT III Railways, Mula Pravara Electric Co-operative Society, which is a licensee, HT Agriculture and HT VI Group Housing Societies. ToD tariffs will also be compulsorily applicable to LT V industrial category above 20 kW sanctioned load, as well as optionally available to LT – V category consumers having sanctioned load below 20 kW, who have TOD meters. The TOD tariffs have been retained at existing levels."

The above clause should be read as given below:

"The Time of Day (ToD) tariffs will be applicable compulsorily to HT I Industry, HT II Commercial, HT IV Public Water Works, but excluding HT III Railways, HT V Agriculture, HT VI Group Housing Societies and HT VII Mula Pravara Electric Co-operative Society, which is a licensee. ToD tariffs will also be applicable to LT V industrial category above 20 kW sanctioned load, LT III Public Water Works and LT II consumer category above 20 kW sanctioned load, as well as optionally available to LT – V category consumers having sanctioned load upto 20 kW and LT II category consumers upto 20 kW sanctioned load, who have TOD meters. The TOD tariffs have been retained at existing levels".

2. Para 48 of the Operative Order states,

"The Commission reiterates that that HT-V Residential would be applicable only to the Group Housing Societies. MSEDCL had been directed to ensure metering arrangements so that consumers currently classified under HT-V Commercial Category, and requiring a single point supply, will have to either operate through a

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franchise route or take individual connections under relevant category. MSEDCL is directed to ensure compliance with this directive immediately."

In the above clause, HT V Residential / HT V Commercial category should be read as "HT VI Category".

- 3. In Table 4 of the Operative Order, the following changes should be made:
 - a. The fixed charges for LT VII Temporary Other Purpose, should be read as "Rs 250 per connection per month" instead of "Rs 250 per connection per occasion of supply"
 - b. The applicability of the TOD tariff for LT category should be read as "TOD Tariff (in addition to base tariff, after installation of MD meter) compulsorily applicable for LT II above 20 kW, LT III and LT V above 20 kW, as well as optionally available to LT II category upto 20 kW and LT V upto 20 kW".
 - c. Note 2 after Table 4 states,

"Billing Demand for LT V categories and LT II 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"

The above should be read as "Billing Demand for LT II categories, LT III and LT V category having MD based tariff"

- 4. In Table 5 of the Operative Order, the following changes should be made:
 - a. The applicability of the TOD tariff for HT category should be read as "TOD Tariff (in addition to base tariff) for HT I, HT II & HT IV"
 - b. Note 3 after Table 5 states, "HT Industries & HT Water Works (HT I & HT IV)"

The above should be read as "HT Industries, HT Commercial and HT Water Works (HT I, HT II and HT IV)"

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- 5. On Page 27 of the Operative Order, applicability for receiving Power Factor Incentive should be read as "Applicable for HT I, HT II, HT IV, and LT II above 20 kW, LT III and LT V above 20 kW)" instead of "(Applicable for all HT categories, except HTP III with specific dispensation, and LT III, LT V and LT IX categories)".
- 6. On Page 28 of the Operative Order, applicability for receiving Power Factor Penalty should be read as "Applicable for HT I, HT II, HT IV, and LT II above 20 kW, LT III and LT V above 20 kW)" instead of "(Applicable for all HT categories, except HTP III with specific dispensation, and LT III, LT V and LT IX categories)".

This Order is the detailed Order on the APR Petition filed by MSEDCL, which deals with the truing up for FY 2006-07, Annual Performance Review of FY 2007-08 and determination of revised revenue requirement and tariff of MSEDCL for FY 2008-09. 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 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 end 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 points.
- Section 3 of the Order details the Commission's analysis and decisions on the truing up sought by MSEDCL for FY 2001-02.
- **Section 4** of the Order details the truing up of expenses and revenue of MSEDCL for FY 2006-07.

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- Section 5 of the Order comprises the Review of Performance for FY 2007-08, covering both physical performance and expenditure heads. This Section also comprises the Commission's analysis on various components of revenue requirement of MSEDCL for FY 2008-09, including sales projections, distribution losses, energy balance, power purchase, etc.
- **Section 6** of the Order comprises the Tariff Philosophy adopted by the Commission and the category-wise tariffs applicable for FY 2008-09.
- **Section 7** specifies the applicability of the Order.

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

2.1. ADMISSIBILITY OF APR PETITION

Vidarbha Industries Association (VIA) submitted that MSEDCL's Petition is not in accordance with Sections 45(4) and 61 of the EA 2003, and MERC (Terms and Conditions of Tariff) Regulations, 2005, as the proposal neither encourages competition, efficiency, economical use of resources, good performance and optimum investments, nor does it safeguard consumers' interest. Further, MSEDCL's proposal for recovery of the cost of supply of electricity is neither reasonable nor does it reduce cross-subsidy. VIA added that the annual review of MSEDCL's performance clearly indicates that MSEDCL has been unable to control its expenditure within the levels approved by the Commission and even within its own forecast for the controllable factors. VIA requested the Commission to reject MSEDCL's APR Petition and direct MSEDCL to resubmit the Petition with proper computation of material facts and correct future projections with due consideration to Section 61 of EA 2003 and MERC (Terms and Conditions of Tariff) Regulations, 2005.

Nashik Industries & Manufacturers' Association (NIMA), Thane Small Scale Industries Association (TSSIA), Tata Motors and several others objected to MSEDCL's Petition, which in their opinion sought an excessive tariff hike. They suggested that as the Commission has already accepted the Multi Year Tariff (MYT) framework under its Tariff Order dated May 18, 2007, the present tariff structure could be continued till the end of the first Control Period, i.e., FY 2009-10. NIMA strongly objected to the Petition on the grounds that the Public Notice should have been published by the Company Secretary and not by the departmental person.

R. L. Steels Pvt. Ltd., Kolhapur Engineering Association, ISPAT and several other objectors submitted that MSEDCL's proposal is not maintainable as it is against the principles of MYT and provisions of EA 2003 and National Tariff Policy (NTP).

Karanja Industries Association pointed out that the scope of a Review Petition has clearly been defined under Regulation 17 of the MERC (Terms and Conditions of Tariff) Regulations, 2005 as, "the comparison between forecasted performance and actual performance over previous financial year and similar comparison for the first half of

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current financial year". They submitted that in the context of the current Petition filed by MSEDCL, this period would correspond to review of performance of MSEDCL in FY 2006-07 and first half of FY 2007-08, and inclusion of the projections for second half of FY 2007-08 and FY 2008-09 in review petition is entirely contrary to the provisions of Regulation 17 referred above. On the same grounds, any increase in tariff on account of projected revenue gap (Rs. 782 Crore) for FY 2008-09 cannot be allowed to be part of a review petition. They added that the Commission in its MYT Order has clearly indicated the difficulties and issues involved in such projections and has refrained from taking such projection into account while deciding the tariff for the period from 2007-08 to 2009-10.

Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge representing 20 HT industrial consumers of Aurangabad submitted that MYT principles encourage efficiency, economical use of resources, good performance, and planning for a longer period in the interest of consumers and utility. They submitted that the Commission in its MYT Order has ruled that consumer categories should be reduced; however, MSEDCL has proposed to increase the consumer categories in its present Petition.

Shri Sandeep N. Ohri referred to paragraph 5 (h)(3) of NTP and submitted that once the tariff has been determined by the Commission, it can be reviewed only at the end of the first Control Period (FY 2009-10). He added that entire Annual Performance Review (APR) procedure is illegal and is a violation of EA 2003 and NTP, and hence, the Commission cannot proceed with the current Petition filed by MSEDCL.

Bharat Traders referred to the MERC (Terms and Condition of Tariff) Regulations, 2005 and submitted that MSEDCL has not observed the requirement of 120 days notice period for APR under MYT framework. Khamgaon Peeth Girni Sanghatana and many others submitted that frequent modifications in the proposal reveal the inefficiency of MSEDCL. ISPAT objected to the postponement in the regulatory process due to MSEDCL's inability to make printed documents available within the specified time frame and stated that the same is not permissible.

Greaves Cotton Ltd., J. K. Ansell Ltd. and several other objectors submitted that MSEDCL's proposal is totally unacceptable, since there are major changes, which are not in accordance with MYT principles. They added that the Commission has already provided for truing up of revenue gap, and the variation in variable costs are allowed to be passed on through FAC charges, and the expenditure on costly power is collected

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through ASC mechanism. Solapur Oil Mills Owners Association, Krishna Valley Chamber of Industries & Commerce and others strongly objected to the shortening of the period between tariff revisions.

MSEDCL's Response

MSEDCL has not given any specific response to these objections.

Commission's Ruling

As mentioned in Section 1 of the Order, MSEDCL submitted its APR Petition on November 30, 2007. The Commission, vide its letter dated December 19, 2007, forwarded the preliminary data gaps and information required from MSEDCL. MSEDCL submitted its replies to preliminary data gaps and information requirement on December 24, 2007.

The Commission held a Technical Validation Session (TVS) on MSEDCL's APR for FY 2007-08 and Tariff Petition for FY 2008-09, on December 28, 2008, in the presence of authorised Consumer Representatives. 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, and directed that another TVS would be held on January 3, 2008, before admitting the Petition. During this TVS also, several discrepancies and data inconsistencies/gaps were identified and the Commission directed MSEDCL to submit the additional data and clarifications, to enable the Commission to admit the Petition for further public process. MSEDCL submitted the additional data and clarifications along with its revised APR Petition under affidavit, and the revised APR Petition was admitted by the Commission on January 14, 2008. 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 comments/suggestions from stakeholders on its APR Petition. The Public Notice was published in newspapers on January 15, January 16, and January 17, 2008.

However, MSEDCL thereafter submitted that there was a delay in printing of the APR Petitions, and also that the APR Petition was being reconsidered and being discussed with

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the State Government, with a view to reduce the impact on the consumers. MSEDCL indicated that it would take additional time before the printed Tariff Petitions could be made available to the public. The Commission directed MSEDCL to issue Public Notice in all the newspapers in which the Executive Summary of the APR Petition had been printed and the dates of the Public Hearings at different locations were also stipulated, stating that the Public Hearings were postponed till further notice, and would be intimated in due course.

Subsequently, MSEDCL filed a revised APR Petition on February 13, 2008, which was different from the Petition admitted by the Commission earlier, with the basic change being that the interest expenditure on account of servicing of certain GoM liabilities that were not on the books of MSEDCL, were no longer included as a revenue expenditure in the ARR of MSEDCL for FY 2006-07, FY 2007-08 and FY 2008-09, resulting in a reduction in the ARR by around Rs. 1500 crore. The TVS on this revised APR Petition was held on February 25, 2008. During the TVS, it was revealed that MSEDCL still did not have clarity regarding the possibility that the impact on account of servicing of certain GoM liabilities that were not on the books of MSEDCL, would be sought to be passed on to the consumers through in future years. The Commission directed MSEDCL to discuss the matter with the State Government and clarify its stance in the matter, and submit the additional data and revised APR Petition after the TVS at the earliest, to enable the Commission to admit the Petition for further public process.

MSEDCL submitted the additional data and clarifications along with its revised APR Petition under affidavit, and the revised APR Petition was admitted by the Commission on March 5, 2008. MSEDCL was directed by the Commission to issue a Public Notice in leading newspapers, and to make copies of its Petition available at its designated offices, to enable interested stakeholders to submit their comments and objections to MSEDCL's Petition for approval of APR for FY 2007-08 and tariff for FY 2008-09.

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 comments/suggestions from stakeholders on its APR Petition. The revised Public Notice was published in newspapers on March 10, 2008. The copies of MSEDCL's Petitions and its summary were made

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available for inspection/purchase to members of the public at MSEDCL's offices and on MSEDCL's website (www.mahadiscom.in) and also on the web site of the Commission (www.mercindia.org.in) in downloadable format. The Public Notice specified that the suggestions/objections, either in English or Marathi, may be filed in the form of affidavits along with proof of service on MSEDCL.

Thus, adequate time, as envisaged under the Regulations has been provided to stakeholders to submit their views/suggestions before the Public Hearing, and additional time of 7 days was also provided to file rejoinders.

As regards determination of tariff on annual basis, the Commission in its MYT Order for MSEDCL dated May 18, 2007 has approved the Aggregate Revenue Requirement and trajectory of performance parameters for MSEDCL for the Control Period from FY 2007-08 to FY 2009-10. The retail tariff for MSEDCL's consumers was determined for FY 2007-08 only, in accordance with Regulation 20.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005, which stipulates that the tariff will be determined on an annual basis. Moreover, due to the uncertainties in sales and power purchase and load shedding, the Commission had not approved this major head of expenditure in the MYT Order. Hence, in this Order, the Commission is approving the revised revenue requirement of MSEDCL and the tariff for MSEDCL's consumers for FY 2008-09. Further, the Commission is of the view that the provisions of the National Tariff Policy referred by the objectors do not stipulate that the tariff cannot be determined on an annual basis.

The Commission has approved the truing up of expenses and has determined tariffs based on the total revenue gap determined by the Commission, in accordance with the Commission's Tariff Regulations and stipulations under the EA 2003. The details are discussed in the relevant Sections of the Order subsequently.

2.2. POWER PURCHASE

VIA submitted that the Commission, vide its Tariff Order dated October 20, 2006, has considered sources costing above Rs. 4.00 per unit as costly sources, however, MSEDCL, in its Petition, has considered RGPPL power as costly power source for FY 2008-09, even though the power procurement rate was Rs. 3.39 per kWh in FY 2007-08. VIA, NIMA, Tata Motors and several other consumers also objected to categorization of power

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purchased from Ratnagiri Gas and Power Private Ltd. (RGPPL) under costly power, and requested the Commission to categorize RGPPL power under non-costly power in order to reduce the percentage of ASC applicable to industrial and other consumers. VIA pointed out that in case of HT industrial consumers, the allocation of costly power is higher than that of non-costly power and their tariff would effectively be governed mainly by ASC component.

Mumbai Grahak Panchayat (MGP) submitted that MSEDCL has considered RGPPL as costly power, under the assumption that its revenue would increase in such a scenario, due to the higher ASC levy on subsidising consumers. MGP added that presently RGPPL power is treated as infirm energy, and hence, it does not follow merit order dispatch. RGPPL power tariff is provisionally approved by Central Electricity Regulatory Commission (CERC) and is based on present gas pricing. Further, MGP pointed out that in past, the availability of RGPPL power has not reduced the demand-supply gap in the same proportion. Thane Belapur Industries Association (TBIA) proposed that RGPPL power and Sardar Sarovar Project (SSP) power should be treated as non-costly power. TBIA added that expense incurred on purchase of costly power should be borne by Circles having very high distribution losses.

Tata Motors submitted that MSEDCL is required to purchase costly power to meet the shortfall of power, which is mainly on account of lower MSPGCL generation and higher distribution loss. Thus, inefficiencies of MSPGCL, MSETCL and MSEDCL have resulted into gratuitous burden of costly power on the consumers. Hence, the entire process of power generation, transmission and distribution should have stage-wise accountability and there should be provision for incentive and penalty for performance of the Companies. Tata Motors suggested that MSPGCL should compensate MSEDCL for loss caused due to the reduction in generation and delay in commissioning of new projects and the penalty should be equal to the purchase cost of corresponding costly power. Vidarbha Chamber of Commerce & Industry and Akhil Bhartiya Grahak Panchayat, Akola pointed out that the installed capacity of MSPGCL is 12000 MW whereas actual production is only 9000 MW, and stated that improvement in power plant efficiency would reduce the quantum of costly power purchase.

Karanja Industries Association and Maharashtra Paper and Board Manufacturers Association submitted that the rationale put forth by MSEDCL for consideration of RGPPL power as costly source of power is absurd. Any source of power, if not utilized,

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would cause a shortfall in the supply and would result in increased load shedding. The fact that such non-procurement from a source would increase load shedding hours for all consumers does not, per se, make it liable for treatment as a costly power source. They added that the same logic can very well be applied to all sources of power. They opined that the real motive of MSEDCL behind considering RGPPL power as costly power is to mask the gross increase in cross-subsidy that would result if the norm of Rs. 4.00 per unit is applied as it is, and requested the Commission to reject MSEDCL's proposal for consideration of RGPPL power as costly power.

ISPAT submitted that MSEDCL has proposed to consider RGPPL power as costly power and allocate the same to industrial consumers, under the premise that it benefits industrial customers to a large extent; however, the same proposal also mentions that this will make additional cheap power available to common consumers who will be benefited from reduction in load shedding, which is contrary to the earlier statement. With this concept, industrial consumers would not only end up being allotted more and more costly power, but also would be paying for all the distribution losses for which they do not contribute at all, thus, effectively contributing to more and more cross-subsidy, whereas NTP and EA 2003 stipulate gradual reduction in cross-subsidy and movement towards cost of supply.

Garware Industries Ltd. submitted that the reasoning provided by MSEDCL for consideration of RGPPL power as costly power is against the principles specified by the Commission in its Tariff Orders for FY 2006-07 and FY 2007-08, wherein, consumers were encouraged to use less electricity, thereby reducing demand-supply gap and corresponding reduce the purchase of costly power.

Tata Motors requested the Commission to direct MSEDCL to submit authentic data regarding power purchase in MU, corresponding payments and per unit rate of power purchase from all sources including MSPGCL for FY 2006-07. Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge submitted that the quantum of power purchase for FY 2008-09 should be reduced by considering realistic sales projections, and added that MSEDCL has not considered power availability under the UI mechanism.

Shri S. R. Paranjape suggested that the Commission should allocate costly power only to the consumers in the non-sheddable category. Kolhapur Engineering Association referred to MSEDCL's submission that distribution losses have been reduced by 8% in last two years and stated that with reduction in losses, there would be savings of approx. 8300

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MU corresponding to savings of Rs. 2770 Crore for FY 2008-09, and hence, there is no need for any tariff increase for FY 2008-09.

Maharashtra Navnirman Sena and Urja Manch, Aurangabad pointed out that in past 10 years, MSPGCL has not taken any efforts to increase its generation capacity. Further, MSEDCL has not entered into any long term power purchase agreement, which has resulted into huge shortfall of power, and submitted that consumers should not be loaded for inefficiency of the Companies.

MSEDCL's Response

MSEDCL submitted that Maharashtra is suffering from severe power shortage throughout the day and hence, MSEDCL purchases power from all possible sources to mitigate the demand-supply gap. MSEDCL stated that it has categorized RGPPL power as costly as well as non-costly source for FY 2007-08, in accordance with the Commission's Tariff Order. MSEDCL submitted that while estimating power purchase expenses for FY 2008-09, it has considered RGPPL as costly source on the basis that the average load shedding would increase to 10.10 hours if RGPPL power is not purchased. MSEDCL added that beneficiaries of RGPPL power are primarily the industrial consumers and other ASC paying consumers, who are benefited in terms of reduced load shedding. MSEDCL further submitted that though the rate of RGPPL power is less than Rs. 4.00 per unit, it is still costly compared to the power from MSPGCL and CGS. The impact of power procurement from RGPPL is also higher, since it comprises a significant quantum of the overall power purchase.

MSEDCL added that if RGPPL is considered as non-costly power, then the higher cost of RGPPL power would have to borne by all consumer categories who are actually not benefited from the reduced load shedding. Hence, MSEDCL has considered RGPPL as costly source, so that consumers benefiting from the reduced load shedding hours vis-à-vis uniform load shedding hours would pay for the costly power procured to mitigate load shedding. MSEDCL stated that it is extremely important that full cost of power is recovered from the subsidizing category who are benefiting from the reduced load shedding.

MSEDCL added that electricity generation is a function of MSPGCL, which does not fall under the business operations of MSEDCL, and hence, MSEDCL cannot comment on generation related issues.

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Commission's Ruling

In its APR Petition, MSEDCL has requested that RGPPL should be considered under costly power, even though the projected power procurement rate was around Rs. 3.60 per kWh, since in case RGPPL power was not procured, it would result in significant increase in the load shedding to different categories and regions. However, the Commission does not find any merit in MSEDCL's contentions in this regard, since

- § RGPPL power is primarily intended for the State of Maharashtra on a long-term basis. Any such source of power, which is being procured under a long-term PPA, has to be considered as one of the pool sources, to be shared equitably amongst all the consumers in the State, rather than be earmarked for a select few consumers and regions.
- The argument that load shedding will increase if power procurement from RGPPL is not undertaken, though true, can be extended to procurement from any source, including MSPGCL or CGS. Moreover, the power procurement from RGPPL is not being denied, it is only the mechanism of recovery of the cost that is being modified.
- The rate projected by MSEDCL for power procurement from RGPPL is Rs. 3.6 per kWh, while the Commission has considered the weighted average rate as Rs. 3.40 per kWh based on the higher power purchase considered on the basis of the CEA targets. While introducing the concept of ASC, the Commission has been considering all short-term power purchases costing above Rs. 4 per kWh as costly power. While there may be no economic rationale for considering a particular level as the cut-off for such purposes, having established the same, it will be improper to shift the cut-off so that a particular source qualifies as costly power. In the MYT Order also, the Commission bifurcated power procurement from RGPPL into two parts, viz. for the seven month period from April to November, RGPPL power was treated as a costly source, since the rate of power procurement was expected to be around R. 5.01 per kWh, while for the remaining part of the year, the rate of procurement was expected to be around Rs. 3.05 per kWh, and hence, this quantum was considered as non-costly power.

It should be noted that there is no loss to MSEDCL in the context of RGPPL being considered as non-costly power and the ASC matrix being removed, since MSEDCL has been given full recovery of all its power purchase costs, including that from RGPPL power. Thus, in view of the above observations, the Commission has done away with the

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concept of categorisation of power purchase as costly and non-costly sources, and all the power purchase expenses have been pooled and recovered through the ARR from all the consumers through category-wise tariffs as determined in Section 6 of this Order.

As regards the observations regarding the performance and efficiency of MSPGCL and MSETCL, the same has been addressed in separate Orders by the Commission, and this Order deals only with the APR of MSEDCL for FY 2007-08 and determination of ARR and Tariff for FY 2008-09. The Commission's analysis of truing up for FY 2006-07 and provisional truing up for FY 2007-08 is detailed in Sections 4 and 5 of this Order subsequently.

2.3. SALES FORECAST

Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA) objected to the energy sales projected by MSEDCL and submitted that the impact of monsoon and summer months and impact on water availability is not at all reflected in the projected consumption figures. MCCIA proposed that any cost incurred for legally untenable sales, i.e., un-metered sales should not be approved by the Commission.

Tata Motors and several other consumers submitted that projected sales for FY 2007-08 and FY 2008-09 are unrealistic due to incorrect projections of un-metered sales. Vidarbha Iron & Steel Corp. Ltd. referred to MSEDCL's submission that projected increase of 45% against metered consumption of LT categories is because of substantial increase in metered pumps, and stated that this should correspondingly result in reduction in unmetered agricultural consumption.

Association for Hundred Percent Export Oriented Spinning Units, Kolhapur proposed that HT sales forecast should be increased for FY 2008-09, which would also raise total revenue figures for MSEDCL.

MCCIA and several other consumers strongly objected to the agricultural sales projected by MSEDCL and stated that the sales figures are unrealistic as they are not based on the actual data of meter reading. MCCIA referred to Section 55 of EA 2003 that requires the Licensee to supply electricity only through correct meters within two years of enactment

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of the Act, and requested the Commission to disallow the cost of un-metered supply and to initiate exemplary penal actions against MSEDCL for non-compliance of the provisions of EA 2003.

Karanja Industries Association and Maharashtra Paper & Board Manufacturers Association, Aurangabad referred to the Annexure to the Petition, wherein, MSEDCL has submitted that load shedding would be eliminated in agricultural region from January 2009 except for force majeure events, and proposed that the agricultural tariff should to be fixed as near to the cost of supply as possible. Vidarbha Chamber of Commerce & Industry suggested that the quantum of free power supplied to agricultural sector should be restricted, to avoid misuse of electricity for other purposes.

Grahak Panchayat, Nagpur requested the Commission to direct MSEDCL to meter all the agricultural consumers and provide uninterrupted power supply to agricultural sector throughout the State with minimum charge. Maharashtra Rajya Veej Peedit Grahak Sanghtana, Latur, submitted that agricultural productivity depends on access to electricity. Metering is necessary to realize actual agricultural consumption, thereby, segregating theft and distribution losses that are hidden within the present assessment of agricultural consumption. Urja Manch, Aurangabad proposed that a separate tariff should be levied for agricultural consumers having land less than 5 acres.

MSEDCL's Response

MSEDCL submitted that sales projection involves a two-step process. In the first stage MSEDCL projected sales based on CAGR of past five years. However, CAGR projections cover only restricted sales, whereas MSEDCL is sourcing all available power to mitigate load shedding to the extent possible. Therefore, in the second stage ,MSEDCL has assumed that additional energy would be made available for LT consumer categories, who are the primary sufferers of load shedding. Allocation of additional energy available to LT sales has been done on pro-rata basis of actual consumption mix. MSEDCL projected that sales increase is a result of factors, viz., usual consumption rise, availability of more power and reduction in distribution losses and theft.

Commission's Ruling

The Commission's analysis of actual and projected sales in FY 2007-08 and FY 2008-09, including the assessment of un-metered sales, is detailed in Section 5 of this Order.

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2.4. DISTRIBUTION LOSS

TBIA submitted that the distribution loss reduction trajectory considered by MSEDCL is not at all acceptable and requested the Commission to direct MSEDCL to reduce both, commercial and technical losses. TBIA suggested that MSEDCL has to adopt methods such as High Voltage Distribution System (HVDS), PVC insulated LT conductor, etc., which would result in appreciable reduction of aggregate technical and commercial losses. TBIA suggested that check meters should be installed at feeder level to verify the consumption recorded in the consumer's meter and to have control over theft of electricity by tampering of meter.

Tata Motors submitted that MSEDCL's failure to reduce the distribution losses as stipulated in various Orders of the Commission, is inexcusable and the commercial burden resulting from such failure cannot be passed on to the paying consumers. Tata Motors added that in many zones of MSEDCL; T&D losses are above 30%, which exhibits MSEDCL's poor performance in the context of reduction of losses to desired level. Tata Motors stated that MSEDCL is unable to project the proper consumption against un-metered category and is also not showing firm determination to implement the metering plan for un-metered consumers, and suggested that the Commission should direct MSEDCL to submit a time-bound action plan to bring down distribution losses to the desired level of 15%, otherwise, a surcharge on account of increased T&D losses should be made applicable only on the regions where T&D losses are higher than 15%. Tata Motors, Shri Sham Patil and others suggested that third-party energy audit should be undertaken for independent verification of loss levels. They added that even if 50% of the amount on account of theft is recovered, the tariff hike would not be necessary at all.

Tata Motors requested the Commission to direct MSEDCL to publicize data related to actions taken by MSEDCL on the following aspects to arrest the theft:

- a) Number of FIRs registered
- b) Number of Panchnamas carried out
- c) Number of people arrested
- d) Number of cases filed in Courts of Law
- e) Number of cases decided by Courts of Law
- f) The organizational structure created by MSEDCL to drive the movement to arrest theft of electricity
- g) Amounts recovered till date

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Tata Motors, HINDALCO and several HT consumers objected to imposition of cost of distribution losses on EHV and HT consumers, as these consumers are already contributing heavily to cross-subsidy. Further, theft of energy is negligible on EHV or HT network.

Prayas and MGP submitted that in the absence of official connections, people are forced to either not use electricity or use it through illegal connections, neither of which is desirable for the State of Maharashtra. Hence, it is essential to undertake a special drive by MSEDCL to provide electric meter to all illegal connections with levy of nominal connection charges, and regularise the connections. Prayas suggested that even permanently disconnected consumers should be provided with official connection under this scheme if their arrears are less than Rs.10,000, which could be collected through levy of a small surcharge on the regular bills of respective consumer. They submitted that effecting such official connections on a large scale would help in reducing the distribution losses of MSEDCL and would also bring in additional revenue. This additional revenue itself may offset all the expenses of providing such connections. Funds under Rajeev Gandhi Grameen Vidyutikaran Yojana (RGGVY) as well as Rs.14000 Crore sanctioned for infrastructure plan of MSEDCL could be used effectively to provide such new connections. Prayas requested the Commission to direct MSEDCL to submit, within a month, a detailed scheme to provide official connections on large scale. In addition, the Commission should include details about the status of universal access to electricity, MSEDCL's targets for the same, in its Tariff Order.

Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge submitted that MSEDCL has planned a huge capital investment for development of infrastructure to reduce losses. After such a huge investment, if loss reduction target is not achieved, then investing such a huge amount is not worthwhile. Utter failure of MSEDCL not to reduce even 1% of technical losses after such huge investment shows its inefficiency. They pointed out that MSEDCL has not provided any details pertaining to distribution losses under Form 15 enclosed along with the Petition and the same is left blank. MSEDCL has not complied with various directions issued by the Commission and it has also violated the provisions of NTP and EA 2003 related to 100% metering and submission of energy audit data, etc. Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge suggested that MSEDCL should target to reduce losses on feeder wise basis.

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R. L. Steels Pvt. Ltd. submitted that the tariff hike mainly revolves around the percentage of distribution losses and suggested that if MSEDCL has actually reduced the losses to 22.5 %, then there is absolutely no need for any tariff hike. Nasik Municipal Corporation (NMC) submitted that distribution losses in adjoining States, viz., Andhra Pradesh, Gujarat and Karnataka are less than 18% and submitted that MSEDCL should target a distribution loss level of 15%.

Karanja Industries Association submitted that reduction in distribution losses is meaningless unless all consumers are metered. Un-metered consumption acts as a convenient grey area in which any amount of loss can be compensated. Moreover, this convenient abstraction also serves to inflate the demand figures and consequently, affects the load shedding protocol.

Khamgaon Peeth Girni Sanghtana, Shri R. B. Agarwal and others proposed that technical losses should not exceed 5%. Further, theft should be segregated from T&D losses. Vidarbha Chamber of Commerce & Industry pointed out that after appointment of franchisee in Bhiwandi Circle and three divisions of Nagpur Urban Circle, distribution losses have reduced considerably and revenue has also increased and suggested that MSEDCL should appoint franchisees in more urban divisions to augment the revenue and reduce distribution loss thereby increasing the profitability.

Khamgaon Vakil Sangh requested the Commission to appoint independent agency comprising technically qualified persons for distribution loss assessment. The Institution of Engineers (India), Nashik Local Centre, suggested that MSEDCL should also adopt following measures to reduce the distribution loss levels:

- a) laying underground cables in Urban areas
- b) ensuring capacitors at consumer levels
- c) avoiding overloading of distribution systems.

Janata Dal (Secular) Vasai Taluka, Nirbhay Jan Manch and others submitted that majority of energy theft is observed at night hours and expressed the need for night flying squads. Lloyds Steel Industries Ltd. suggested that MSEDCL should change the system of recovery of distribution loss, and tariff should reflect region-wise distribution loss.

Maharashtra Rajya Veej Grahak Sanghtana proposed that Variable Distribution Loss (VDL) charge should be levied on the basis of distribution loss percentage and collection

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efficiency and suggested that the VDL charges should be levied feeder wise. Further, they submitted that distribution loss figures of 22.50% presented by MSEDCL are incorrect. RGPPL power is categorized under costly power only to reduce distribution loss percentage. Actual loss of non costly power is 31.11% and 11.67% for costly power.

Urja Manch, Aurangabad submitted that division-wise distribution loss figures indicates that there is no improvement in losses, on the contrary, in some divisions, losses are increasing.

Maharashtra Elektrosmelt Ltd. submitted that distribution loss reduction has not been projected circle-wise by MSEDCL. They added that MSEDCL should continue its efforts for reduction in distribution loss by 4% every year for improving its revenue earning and financial position.

MSEDCL's Response

MSEDCL submitted that its distribution network is overloaded and has deteriorated over time, which is the main cause for increase in technical losses. MSEDCL stated that it has finalized internal reforms programme to reduce technical and commercial losses and improve collection efficiency. MSEDCL submitted that it has taken the below referred initiatives to reduce distribution losses:

- a) Monthly energy accounting at division level/feeder level/DTC level
- b) LT loss reduction target for each division/sub division
- c) Photo meter reading
- d) DTC and feeder meter reading through Digital Camera
- e) Metering of 1.17 Lakh DTCs is completed, work is in progress for balance 1.33 Lakh DTCs
- f) Metering of all 9339 feeders
- g) Massive theft control drive
- h) 6 Police stations have been set up for efficient handling of theft of energy/other cases.
- i) Checking of energy intensive consumers with doubtful consumption
- j) Capital Investment plans
- k) Network upgradation work under DRUM at Aurangabad Division
- l) Accelerated Power Development Reforms Programme (APDRP) schemes for 30 cities is in progress
- m) Strict disciplinary action against delinquent employees
- n) Speedy disposal of vigilance cases and strict action against defaulters

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- O) Creation of more number of distribution franchisees in MSEDCL areas for improvement in metering, billing and revenue collection.
- p) Introduction of HVDS system in theft prone areas
- q) Improvement in metering and billing.

MSEDCL provided Theft Report for FY 2006-07 with FY 2007-08 (Up to Jan 08), as under:

		Raids conducted (Nos.)		Theft cases detected (Nos.)		FIR lodged (Nos)		Amount realized (Rs.in cr.)	
Sr. No. Stat	State	FY 2006- 07	FY 2007- 08 (Upto Jan 08)	FY 2006- 07	FY 2007- 08 (Upto Jan 08)	FY 2006- 07	FY 2007- 08 (Upto Jan 08)	FY 2006- 07	FY 2007-08 (Upto Jan 08)
1	Bhandup	20566	73814	4247	4849	1045	983	4.83	4.06
2	Kokan	22786	58304	38	195	1	8	0.05	0.36
3	Kalyan	43048	68851	5601	6391	630	694	1.33	4.32
4	Latur	7067	9679	4480	6817	1264	1027	1.21	2.42
5	Nasik	32414	46008	12757	13984	2639	1214	5.89	5.29
6	Kolhapur	10688	9254	1841	3330	165	105	0.54	0.95
7	Pune (U)	2808	4339	4023	3982	365	132	2.44	4.54
8	Amravati	9937	25823	8100	10923	333	425	1.92	2.67
9	Aurangak	27450	9512	4883	7552	1024	1298	0.86	1.31
10	Nagpur	7413	43137	6515	6857	550	666	2.71	2.90
11	Nagpur (l	20071	37671	4279	11877	1550	1427	2.22	3.54
	TOTAL	204248	386392	56764	76757	9566	7979	24.00	32.35

MSEDCL, in its presentation during the Public Hearing, submitted that it has reduced distribution losses by 7.65% during FY 2007-08. MSEDCL also submitted data related to the following actions taken by MSEDCL to arrest theft of electricity:

- a) Number of FIRs registered 7085
- b) Number of accused involved 12801
- c) Number of people arrested 1774
- d) Number of cases registered and compounded 2188
- e) Number of accused involved-charge sheeted 1515
- f) Amount of assessment in FIR Rs. 2248.67 Lakh

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Commission's Ruling

The Commission has re-assessed the actual distribution losses in FY 2006-07, while truing-up expenses and revenue for FY 2006-07, based on data submitted by MSEDCL and the Balancing and Settlement undertaken by the Maharashtra State Load Despatch Centre (MSLDC). The details of the same are provided in Section 4 of this Order. The base level of distribution losses for the MYT Control Period has thus been restated based on the actual distribution loss in FY 2006-07. The trajectory of reduction in distribution losses over the Control Period has been considered as 4% per year, as stipulated in the MYT Order. The Commission's analysis of actual and projected distribution losses in FY 2007-08 and FY 2008-09 is detailed in Section 5 of this Order.

2.5. OPERATION AND MAINTENANCE EXPENSES

NIMA submitted that MSEDCL's projection of R&M expenses is extremely high. NIMA suggested that A&G expenses should be reduced by strict implementation of measures like, (1) reduction in manpower, (2) use of latest equipments, (3) proper material management, (4) efficiency enhancement, (5) proper asset management, (6) proper disposals of waste materials, etc. Vidarbha Iron & Steel Corp. Ltd. objected to MSEDCL's submission that higher provisioning has been made on account of security towards reduction of theft and illegal connections and submitted that the same should be justified by corresponding increase in the revenue due to avoidance of pilferage.

Garware Industries Ltd. objected to the projected increase of 4% in over time cost of the staff and submitted that MSEDCL must put in all efforts to minimize overtime cost. Ambad Industries & Manufacturers' Association (AIMA) stated that employee expenses are very high, even without implementation of provisions of the Sixth Pay Commission. Grasim Cement submitted that increase in R&M expenditure is higher than inflation and suggested that all efforts must be made to improve maintenance standards, which would result in reduced maintenance cost, and equipment availability will be increased resulting in better revenue generation. Increase of 37% in A&G expenses is abnormally high even considering impact of inflation.

MSEDCL's Response

MSEDCL submitted that R&M expenditure is high due to deteriorated network. MSEDCL added that O&M expenditure has increased due to the following reasons:

a) Increase in 'Dearness Allowance' (DA) and 'Provident Fund'

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- b) Provision for leave encashment made on accrual basis
- c) Increase in security charges
- d) frequent repairs and maintenance of old infrastructure.

MSEDCL added that immediate requirement of sizeable R&M works arises mainly due to ageing effect and due to the shifting and repair and maintenance of lines and cables.

Commission's Ruling

The Commission's analysis of actual and projected O&M expenses in FY 2007-08 and FY 2008-09 is detailed in Section 5 of this Order.

2.6. DEPRECIATION

Finolex Industries Ltd. submitted that depreciation is an internal resource to finance projects and not cash expenditure and requested the Commission not to allow the high depreciation expenses projected by MSEDCL, including advance against depreciation.

MSEDCL's Response

MSEDCL has not given any specific response to this objection.

Commission's Ruling

The Commission has approved the depreciation expenses in accordance with the Commission's Tariff Regulations and philosophy adopted in previous Tariff Orders. The Commission's analysis of actual and projected depreciation expenses in FY 2007-08 and FY 2008-09, including advance against depreciation, is detailed in Section 5 of this Order.

2.7. INTEREST EXPENSES

Prayas and Marathwada Association of Small Scale Industries and Agriculture objected to MSEDCL's provision of Rs. 120 Crore on account of interest on working capital due to shortfall in collection efficiency and submitted that MERC (Terms and Conditions of Tariff) Regulations, 2005 do not provide for such a component in tariff computation. Further, in the absence of any proof regarding MSEDCL actually availing working capital to meet the shortfall, inclusion of this component in the tariff provides perverse incentive to MSEDCL and helps it to hide its inefficiency.

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MSEDCL's Response

MSEDCL has not given any specific response to these objections.

Commission's Ruling

The Commission has approved the interest on working capital loans in accordance with the Commission's Tariff Regulations, which provide for computation of net working capital requirement considering the credit available for power purchase payments and consumers' security deposit available with MSEDCL.

2.8. LOAD SHEDDING

TBIA suggested that the areas having distribution losses lower than 18% should be exempted from load shedding. TBIA submitted that industrial areas have minimal losses and they should be exempted from load shedding. TBIA opposed the proposal of implementation of second staggering day to the industries. NIMA submitted that MSEDCL does not have any vision to plan for its demand and supply.

Chamber of Small Industries Association (COSIA) submitted that the load shedding proposal of MSEDCL should be rejected; instead, MSEDCL should reduce load shedding hours by arranging power from all available sources and reducing distribution losses to the benchmark level on urgent basis. Tata Motors requested the Commission to bring more clarity on the definitions of continuous and non-continuous industries. Maharashtra Paper & Board Manufacturers Association, Aurangabad proposed that the Commission should reclassify the industries as continuous and non-continuous on the basis of production process and irrespective of whether they are on express feeder or not, as all industries cannot afford the expense of going for express feeders to avail continuous power supply. Shri S. R. Paranjape suggested that imbalance between the available supply and demand can be avoided by setting appropriate limits on individual feeders. If the load on any individual feeder exceeds the stipulated value, that particular feeder should be tripped by giving adequate warning to the consumers. He added that the limits should be imposed on feeders serving non-sheddable loads with due consideration of share of affordable energy and costly energy to generate equal awareness in the consumers in the non-sheddable category.

R. L. Steels Pvt. Ltd. submitted that load shedding cannot be accepted as a permanent phenomenon. Load shedding must always be treated as an exception and all possible

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efforts must be made to reduce the same. No charge can either be created or levied on the basis of load shedding or expenses incurred to procure power to curb load shedding. They added that the licensee is not providing any additional power but in fact is providing insufficient power. NMC requested the Commission to provide uninterrupted supply to water pumps and suggested that cost incurred on erection of express feeder must be borne by MSEDCL to maintain the continuity of water supply.

HINDALCO submitted that in terms of NTP, there is a total failure on part of MSEDCL to ensure reliable and quality power due to its inefficient operations resulting in very exorbitant power tariffs, threatening the livelihood of the population dependent on industrial operation. Shri Girish Kulkarni suggested that proportionate compensation should be provided to each and every customer affected by load shedding. Karanja Industries Association referred to the study carried out by Prof. Rangan Banerjee and suggested that an independent group comprising of representatives of MSEDCL, consumer representatives and technical experts should be constituted to investigate situation of demand-supply gap and the group should present a report on the actual power shortfall to the Commission.

Shri Tushar Bhartiya, BJP, Amravati submitted that MSEDCL cannot discriminate amongst the consumers on the basis of either their use or geographical location and requested the Commission to reduce the load shedding hours of Amravati to the level of load shedding carried out in Nagpur. Vidarbha Chamber of Commerce & Industry, Shri Rajendra Agrawal and others submitted that almost 50% of electricity required for Maharashtra State is being generated in Vidarbha region, but no benefit or concession is given to consumers of this area. They strongly opposed heavy load shedding in Vidarbha region and proposed that electric supply to Mumbai city should be discontinued by MSEDCL or be supplied with higher tariff to Mumbai city.

Shri R. B. Agarwal, Shri Vijay Mahale and many agricultural consumers submitted that they receive the power supply at night hours only but it is not possible to do farming during night-time because fields are infested with snakes and other vermin, which are dangerous to life. They added that students' education is badly affected due to load shedding. Amravati Retail Cloth Merchants Association and many Flour Mill Associations stated that load shedding should not be undertaken in evening hours.

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Shri Prakash Jaiswal submitted that actual load shedding undertaken by MSEDCL is in excess of the load shedding protocol approved by the Commission. He added that many non-continuous industrial consumers are also applying for express feeders to avoid problem of load shedding. Maharashtra Rajya Veej Peedit Grahak Sanghatana, Latur requested the Commission to revise the principles and protocol of load management for agricultural scheme, viz., Single phasing scheme, Akshay Prakash Yojana, Gaothan feeder separation scheme. They stated that zero load shedding is possible in many industrial areas by adopting Pune load shedding model.

Association of Hundred Percent Export Oriented Spinning Units, Kolhapur submitted that load shedding does not result in reduction in consumption, rather it shifts the consumption to some other time slot. Tarapur Industrial Manufacturers' Association (TIMA) suggested zero load shedding model for areas having distribution losses lower than 5%. Confederation of Indian Industry (CII) objected to proposal of additional staggering day to industries, and submitted that MSEDCL should arrange for increase in availability of power instead of increase in load shedding.

Maharashtra Rajya Veej Grahak Sanghtana proposed that no discrimination should be made between Urban and Rural areas in terms of load shedding hours. They suggested that divisions with loss levels lower than 18% should be categorized under A+ category and load shedding should be carried out in line with MIDC areas. Shri N. Ponrathnam submitted that MSEDCL has persistently failed to maintain uninterrupted supply of electricity, thereby, violating Section 24 of EA 2003, and hence, should be punished in public interest.

MSEDCL's Response

MSEDCL presented the power scenario of Maharashtra as under:

Year	Peak Demand (MW)	Availability (MW)	Peak Shortfall (MW)
2001-02	10119	9103	1016
2002-03	11425	9150	2275
2003-04	11357	9315	2042
2004-05	12749	9704	3045
2005-06	14061	9856	4205
2006-07	14825	10298	4527
nai 2007-08	15689	10412	5277

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MSEDCL submitted that emergency load shedding increased in FY 2007-08 due to frequent Under Frequency Relay (UFR) Trippings. Moreover, northern grid is overdrawing power, leading to overall low frequency operation.

Commission's Ruling

During the course of the public regulatory process, MSEDCL submitted a modified load shedding protocol, in accordance with the directives of the Commission, which was discussed during the Public Hearings. The Commission's decision on the modified load shedding protocol has been elaborated in Section 6 of this Order.

2.9. CROSS-SUBSIDY

VIA submitted that MSEDCL has violated the ATE Judgment, which ruled that once the cross-subsidy is reduced, it should not be increased again and requested the Commission to maintain the trend of progressively reducing cross-subsidy as done in previous Tariff Orders.

MGP pointed out that in accordance with Section 65 of the EA 2003 and Section 8.3 of NTP, subsidy is to be borne by the State Government, and not by other consumer categories. MGP submitted that the capacity to pay is only invoked for BPL consumers for which subsidy is provided by State Government as per Section 65 of EA 2003 and higher capacity to pay is not a legally valid ground to discriminate between consumers, since it violates the principles of Section 62(3) of EA 2003. TBIA, MCCIA and many other consumers requested the Commission to fix a time frame for complete removal of cross-subsidy, thereby reducing the industrial tariff so as to reflect the actual cost of supply.

NIMA submitted that provision of electricity to public water works and agriculture at subsidized rate and in turn imposing higher rates on industries is unjustified, irrational and illogical. There should be fair and equal treatment for all consumers; otherwise, there would be an adverse effect on industries leading to closures, shifting and unemployment.

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COSIA submitted that industrial tariff is already high and no extra cost should be recovered from them. Tata Motors objected to progressively increasing industrial tariffs and submitted that as per the principles enshrined in the EA 2003, all categories should converge towards the average cost of supply and cross-subsidy should have been eliminated by the year 2005. They added that MSEDCL has also accepted this principle but has proposed the tariff exactly against the principles while submitting tariff proposal every time and requested the Commission to reject MSEDCL's proposal of tariff hike to industries and in turn reduce the level of cross-subsidy.

Indian Railways suggested that there should not be any cross-subsidy for Railways. Karanja Industries Association submitted that EA 2003 explicitly forbids cross-subsidy; even the Commission had taken a similar view on reduction of cross-subsidy. Further, MSEDCL has agreed that it would eliminate cross-subsidies by FY 2010-11. The Commission should direct MSEDCL to eliminate cross-subsidies in a phased manner. They submitted that the main components of massive increase of cross-subsidies are:

- a) Tariff reduction proposed for MPECS
- b) Tariff Reduction proposed for PWW schemes
- c) Incorrect projections of growth in agricultural consumption at 45% and industrial consumption at 10%.

M/s Lupin Ltd., Shri R. S. Fultankar, The Bombay Burmah Trading Corporation Ltd. and many other consumers objected to the increase in cross-subsidy by industrial category to subsidize other consumer categories. Shri N. Ponrathnam suggested that use of electricity should be discouraged by eliminating cross-subsidy and charging the reasonable cost of supply, thus eliminating wasteful use of electricity.

MSEDCL's Response

MSEDCL submitted that the trajectory of cross-subsidy reduction in Maharashtra has been too steep, i.e., the differential between the tariff of subsidizing categories and subsidized categories has been reduced more than desirable. MSEDCL pointed out that NTP provides for cross-subsidy levels within the range of +/- 20% of the average cost of supply latest by the end of year 2010-11. MSEDCL stated that NTP has allowed more time for the States to reduce the cross-subsidy. MSEDCL has considered average billing rate including ASC charges to calculate Cross subsidy. MSEDCL added that cross-subsidy is mainly increased for HT categories, which are benefited from reduced load

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shedding as compared to other LT consumers. MSEDCL has proposed to increase crosssubsidy to factor in the hours of supply.

Commission's Ruling

The tariff philosophy adopted by the Commission for determining the category-wise tariffs has been detailed in Section 6 of this Order. While determining tariffs, the Commission has attempted to reduce the cross-subsidy between consumer categories, while at the same time, ensuring that no category is subjected to a tariff shock. The computation of cross-subsidy with existing and revised tariffs is also given in Section 6 of this Order.

2.10. SEPARATE TARIFFS/CATEGORIES

VIA, Karanja Industries Association and several other consumers objected to any major changes to the tariff structure such as creation of new tariff categories and massive reduction or increase in the tariffs previously approved under MYT Order and submitted that MSEDCL's tariff proposal has violated the provisions of EA 2003. Karanja Industries Association referred to MSEDCL's proposal for tariff reduction of public water work schemes and submitted that such schemes are important for maintaining proper water supply, however, there is no logic in reducing their tariff and burdening mainly the industrial customers to compensate for the loss in revenue.

TBIA proposed that a separate tariff category should be introduced for MIDC consumers, as distribution losses on MIDC feeders are negligible. MCCIA requested the Commission to determine separate tariff for various Circles based on distribution losses.

Maharashtra Jeevan Pradhikaran, several Municipal Corporations, Nagarpalikas and local bodies submitted that one of the major expenditure heads of public utilities is expenditure on electricity bills for street lighting; water pumping and water distribution and their consumption cannot be restricted due to increase in population. They pointed out that local and major sources of water supply at some places get dry in summer season, and therefore, lifting of water from other distant sources during scarcity becomes obligatory for the survival of people. These alternate schemes operate only during scarcity period; however, the demand charges for the remaining period are being charged. They requested the Commission to charge appropriate tariff to water supply schemes only for the period of actual operation.

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Further, they submitted that as most of the geographical area in the State have basalt rock having lower water retention capacity, it becomes essential to identify a reliable common source and develop Regional Water Supply System. These schemes involve pumps of higher capacity and corresponding higher demand and electricity consumption at various stages of the scheme such as raw water pumping, filtration, pure water pumping, etc. However, if the consumption is rationally sub-divided village wise, actual consumption is similar to consumption of single village applicable for LT tariff. They requested the Commission to remove tariff variation between LT and HT supply for water supply schemes, thereby, levying common tariff to both LT and HT category, wherein, energy charge should not exceed Rs. 1.00 per unit and fixed charges of Rs. 15/kVA/month should be levied.

Amanora Park Town submitted that they are developing a township project near Pune city under GoM's Township Policy, which makes it mandatory for township authority to arrange for township power requirement. They pointed out that the tariff proposal does not include any tariff structure whereby township authority can act as a franchisee to MSEDCL and distribute power within its own territory to various type of consumers and requested the Commission to include new category of tariff for self contained township where different categories and loads co-exist.

Sangli District Powerloom Owners Association, Maharashtra Rajya Veej Grahak Sanghatana and several other Powerloom Associations submitted that power loom business is a cottage industry providing livelihood to mainly unskilled and semi-skilled workers especially in rural areas. They added that minimum load of one self-sufficient power loom is 13 HP-15 HP and requested the Commission not to impose any load restriction on power loom category. Similarly, several Flourmill Associations requested for common tariff structure for all loads.

MSEDCL's Response

MSEDCL submitted that it has proposed reduction of tariff for the flour mills considering its impact on the common man, and consumers below poverty line. MSEDCL has proposed to maintain the present tariff of LT power loom consumers considering the critical financial position of the power loom consumers and the necessity to promote power loom industry in the State. MSEDCL added that there are other consumers whose works are motivated towards greater social cause, however, creating sub categories for all

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such consumers would unnecessarily complicate the tariff structure and adversely impact the tariff of the cross subsidizing categories.

MSEDCL submitted that it has proposed tariff reduction for public water works schemes covered under LT III category and HT IV category considering the social impact of tariff on the working of these public utilities. MSEDCL submitted that the average billing rates for HT IV category and LT III category is only 52% and 28% of the average cost of supply of MSEDCL, respectively. Further reduction of tariff would badly impact the tariff of the cross subsidizing categories. MSEDCL stated that the tariff proposed for HT IV category is slightly higher than HT V category because of the reduced load shedding for public water works category as compared to that for agricultural consumers.

Commission's Ruling

The Commission has observed that the tariff categorisation and applicability of tariffs is different across different licensees in the State, which is not appropriate. The differences exist because of historical reasons and differences in management policies and approach across licensees. However, within one State, the consumer categorisation and applicability of tariffs should not be significantly different, and the Commission has attempted to achieve this objective in this Order and other Orders for the distribution licensees in the State. 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 exist only in certain licence areas.

The rationalisation of tariff categories and tariffs applicable to various consumer categories has been elaborated in Section 6 of this Order, while elaborating the tariff philosophy adopted by the Commission for determining the category-wise tariffs.

As regards creation of a separate tariff category for supply intended for townships under a Franchisee Agreement or otherwise, to enable the Township Developer or Franchisee to supply to mixed loads within the township, the Commission has already clarified that taking bulk supply at single point and supplying further to individual dwellings is legal only in case of Group Housing Societies, and in case there are other loads, such as commercial, industrial, etc., the same cannot be supplied through the same connection. Separate individual connections will have to be taken for such loads, as it is possible to supply to such consumers after taking supply at single point, only in case the supplier has a distribution licence or has been appointed as a franchisee by the distribution licensee. In

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case of franchisee, the consumer remains a consumer of the licensee, and all the obligations and duties of the licensee continue to vest with the licensee. As regards appointment of the franchisee and the tariff for supply to the franchisee at single point by the licensee, the same has to be addressed by the licensee through an appropriate process, as the franchisee, being only an agent of the licensee, is not regulated by the Commission and is an arrangement between the licensee and the franchisee and does not absolve the licensee of its obligations to the consumers of the franchisee area.

As regards MSEDCL's proposal to introduce two new sub-categories within LT V industrial category, viz., (a) Power looms, and (b) Flour mills below 10 HP sanctioned load, and levy a lower tariff for these two new sub-categories, the Commission has not created these two sub-categories, and has retained them under the LT V industrial category, as the Commission does not find merit in the proposed categorisation. The Commission has been rationalising the tariff categories over the years, and in fact, in an earlier Tariff Order, the existing separate categorisation for power looms was merged with the LT industrial category by the Commission. The Commission has, however, ensured that there is no tariff increase for the sub-category 0 to 20 kW, thereby protecting the smaller consumers from a tariff shock.

2.11. TIME OF DAY (TOD) TARIFF

VIA submitted that in the changed scenario, when the impact of high cost power purchase is imposed on to the consumers through ASC and IASC, the penalty for peak hours usage by HT I category should be removed, while the rebate on night time consumption should be retained. VIA, Babasaheb Naik Kapus Utpadak Sahakari Soot Girni Ltd. and other consumers suggested that the rebate for usage of electricity during non-peak hours should be increased to incentivise the industries to shift further consumption to night hours, which in turn would help MSEDCL to have a flattened load curve. Prayas requested the Commission to increase the peak hour tariff to restrict the consumption during shortfall hours.

NMC and Maharashtra Jeevan Pradhikaran suggested removing ToD charge for consumption during peak hours, as the pumping systems are required to function irrespective of the time, specifically in morning peak and evening peak time to cater to public demand. Shri Prakash Jaiswal submitted that introduction of ToD based tariff to LT V industries in light of load shedding protocol and increased demand charges, energy

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charges and application of ASC charges would result in increase in tariff several times over, depending upon nature of working of the industries.

Finolex Industries Ltd. submitted that in case of HT continuous process industries, load is evenly distributed throughout the day and it is not possible to shift the load. Kudal MIDC Industries Association proposed that ToD tariff should be applied to industries with connected load above 50 kVA.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

Commission's Ruling

The Commission has retained the ToD tariffs and time slots at the existing levels, since the same has given good results in the past, and the tariff differential between peak and off-peak hours is already significant. The applicability of ToD tariffs has been elaborated in the Section on Tariff Philosophy.

2.12. REMOVAL OF INCENTIVES AND REBATES

VIA, TBIA, MCCIA and several other objectors submitted that all the incentives and rebates available under existing tariff, viz., power factor incentive, bulk discount, load factor incentive and prompt payment incentive, should be continued. NIMA, Balkrishna Industries Ltd. and other consumers submitted that load factor incentive motivates the consumer to use energy more economically, and proposed to increase all the incentives and rebates instead of eliminating them. NIMA added that MSEDCL should provide more incentive for use of non-conventional energy, thereby reducing the existing demand-supply gap.

Tata Motors suggested that special incentive scheme should be introduced for consumers directly connected to EHV network owing to negligible losses as compared to other categories and use of power in bulk quantity. Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge pointed out that in FY 2006-07, MSEDCL had spent only Rs. 72 Crore on account of incentives given to consumers as compared to the approved expenditure of Rs.166 Crore. Further, MSEDCL has estimated expenses on incentives for FY 2007-08 and FY 2008-09 as Rs.75 Crore and Rs.79 Crore, respectively, which is a meagre amount

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for compensating the efficiency of the consumers. They requested the Commission to continue all the incentives during MYT Control Period.

Shri S. R. Paranjape proposed to remove load factor incentive during the power shortage scenario if the Commission retains fixed charges in its Tariff Order. Indian Railways requested the Commission to continue the rebates and discounts provided to Railways.

NMC suggested that the prompt payment discount should be increased to 2%, to bring discipline in the revenue collection. ISPAT strongly objected to the suggested removal of load factor incentive and submitted that the said incentive is not for increased load consumption but to maintain load at a stable level, which helps MSEDCL to lower grid fluctuations irrespective of the existence of electricity shortage. ISPAT suggested that the present load factor incentive percentage should be modified to incentivise consumers towards a flatter load curve.

Arvind Cotspin proposed that the power factor incentive should also be applicable on FAC, FAC₂ and IASC. Babasaheb Naik Kapus Utpadak Sahakari Soot Girni Ltd. suggested that power factor incentive should be increased from 7% to 15%, further, prompt payment incentive should also be increased from 10% to 15%. Jay Maharashtra Magasvargiya Co-op. Spinning Mills Ltd., Islampur suggested that consumers, who are paying their bills regularly and within time, should be eligible for more incentives, which will bring discipline in the revenue collection. Association of Hundred Percent Export Oriented Spinning Units, Kolhapur and others submitted that load factor should be calculated on the basis of actual hours of power supply during a month.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

Commission's Ruling

The Commission has retained the incentives and penalties, with minor modifications, since the Commission is of the view that the benefits to MSEDCL system in terms of contribution to higher power factor, higher load factor, and lower distribution losses, higher collection efficiency, etc., outweigh the expense incurred by MSEDCL on account of these incentives.

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2.13. TARIFF RELATED ISSUES

VIA objected to proposed tariff hike for HT industries, which is on account of proposed reduction in tariff for MPECS, public water works and nominal increase to other categories and submitted that the subsidy, if any, should be provided by the State Government. VIA pointed out that MSEDCL's proposal to subsidize LT Flour mills, Power looms and Street lights at the cost of increased cross-subsidy for HT consumers is against provisions of EA 2003, NTP and MERC (Terms and Conditions of Tariffs) Regulations, 2005.

VIA suggested that the period for temporary connections should be limited to maximum three months, extendable thereafter at the request of consumers. VIA submitted that MSEDCL's proposal to increase tariff by 40% for industrial consumers connected to express feeders and by 34% for industrial consumers connected to non-express feeders is unjustified, creating discrimination in different categories and increasing cross-subsidy, which is against the provisions of EA 2003. VIA added that MSEDCL's proposal to increase fixed costs of HT consumers is unrealistic. Tariff proposed by MSEDCL is higher compared to neighboring States and if MSEDCL's tariff hike proposal is approved by the Commission, all the major industries would migrate to other neighboring States and MSEDCL would be left only with subsidized categories of consumers. VIA requested the Commission to issue rationalized Tariff Order without any increase in the HT industrial tariff since the expenses of MSEDCL are met with existing tariff, which itself is higher than the tariffs in neighboring State.

Prayas suggested that in order to meet the objective of providing very low tariff for BPL consumers, the definition of the BPL tariff needs to be simplified. BPL tariff should be applicable for all consumers consuming less than 500 units per year. Prayas proposed to create a new tariff slab for LT commercial and LT industrial categories having consumption less than 300 units per month. Prayas submitted that consumers consuming less than 300 units per month (domestic/commercial/industrial) are highly vulnerable to electricity bills and are using electricity basically for essential services, hence, it would not be proper to load cost of inefficiency or past claims or any surcharge on such consumers and suggested that tariff for first 300 units of consumption in any category (domestic/commercial/industrial) should not be charged at more than the average cost of supply.

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NIMA suggested that the tariff structure should be simplified by reducing the number of tariff categories. COSIA submitted that industries are forced to use costly captive power due to non-availability of power from MSEDCL. Industries, particularly micro industries and small scale industries should not be expected to pay for the inefficiency of MSEDCL.

Tata Motors pointed out that MSEDCL has no will to improve its efficiency and at the same time does not want industries to grow. The cost of energy is particularly important in the context of open economy where the industrial consumers have to compete in the global market. Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge requested the Commission to determine tariff by adhering to the provisions of EA 2003 and NTP.

Vidarbha Iron & Steel Corp. Ltd., Vidarbha Plastic Industries Association and several other objectors submitted that MSEDCL's proposal to recover entire revenue gap from HT Industries would adversely affect their survival in the long term, instead, the State Government should provide subsidy for subsidized consumers. Swami Ramanand Bharati Sahakari Soot Girni Ltd. stated that increase in power tariff would affect textile industries.

Indian Railways submitted that MSEDCL has not complied with EA 2003 and the Commission's Tariff Regulations while proposing the tariff for Railways. Railways objected to the 64% increase in the energy charges proposed by MSEDCL for Railways, and submitted that proposed tariff is 323% higher than cost of power procurement for Railways.

Garware Industries Ltd. requested the Commission to continue prevailing tariff and objected to any tariff hike for industries on express feeders as they are already compensating for costly power through ASC mechanism. Asahi India Glass Ltd. submitted that glass production is highly energy intensive, and strongly objected to any increase in electricity tariffs.

Shri Vivek Velankar, Baner Mohalla Committee, Salunke Vihar Road Area Mohalla Committee and several other consumers of Pune city objected to tariff hike proposed by MSEDCL for all categories.

Bharat Forge Ltd., Kalyani Carpenter Special Steels Ltd. and many other consumers pointed out that the tariff proposed for HT I industries is higher than the rate of purchase

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of costly power. Grasim Cement submitted that due to high cost, irregular supply and very poor quality of power, most of the HT consumers are shifting from grid supply to installation of own captive generation since existing cost of grid supply is higher than cost of captive power generation.

The Amravati District Gin Press Factories Owners Association submitted that cotton ginning and pressing factories come under seasonal industry that runs in full swing only in the winter months. They pointed that MSEDCL resorts to heavy load shedding on the feeders on which there are numerous cotton processing industries resulting in losses to the cotton processing industries. Many cotton ginning factories have requested MSEDCL for uninterrupted power supply during winter season but MSEDCL has neither provided uninterrupted power supply, nor does it have any policy of minimum load shedding for the feeders on which most cotton ginning and pressing factories are connected. They requested the Commission to direct MSEDCL to charge them the rate of HT I non-express feeders without levy of any Additional Supply Charge till the time it is possible to provide uninterrupted supply. MIDC Industries Association, Amravati submitted that tariff rates for seasonal industries should be lower than tariff rates applicable to MIDC industries.

Vidarbha Chamber of Commerce & Industry and many other consumers objected to the proposed tariff hike for domestic and non-domestic consumers as their tariff has already increased by 11% during last year.

Maharashtra Rajya Kapus Panan Mahasangh, Karmachari Shetkari Sahakari Sutgirni Ltd., Akola suggested that textile industry should be treated as continuous process industry and their tariff should be reduced by Rs. 1.50 per unit. Amravati Flour Mill Owners Association and several other flour mill Associations requested the Commission not to impose any load restriction on LT V flour mills. Further, they proposed that single-phase residential flour mills used for commercial purpose should be banned.

Grahak Panchayat, Nagpur suggested that Multiplexes and Shopping Malls category should be clubbed with Advertisement and Hoardings category and rate of LT VIII tariff should be applicable to both as these are commercial and huge profit making categories.

Can-O-Fabrica Oil Mill objected to the slabs within LT V category on the basis of connected load. They submitted that higher tariff may be applied based on consumption

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criterion and suggested that separate tariff category and tariff should be specified for oil mills within LT V category.

Shri Sham Patil, Smt Medha Patkar, Veej Grahak Sanghtana, Vasai, Maharashtra Rajya Veej Grahak Sanghtana and several other consumers requested the Commission not to increase the tariffs for domestic consumers consuming less than 300 units and non-domestic consumers consuming less than 200 units.

Dayane Powerloom Sangharsh Samiti, Malegaon Powerloom Action Committee, Maharashtra Powerloom Bunkar Sanghatana and many other consumers requested the Commission not to impose any load restriction for Powerloom consumers and suggested that the same tariff should be applicable for power looms below and above 20 kW (27 HP) sanctioned load. Ansari, Momin, Julaha Powerloom Conference, Malegaon and Bhiwandi Textile Twisting Doubling Intermingle Association proposed that power loom tariff should be reduced to Rs. 1.50 per unit and requested to include other activities like Sizing, Warping, Winding, Twisting, intermingle, two-for-one machine, doubling machine, and other small scale yarn machines under power loom category.

Akhil Bhartiya Grahak Panchayat Nasik Mahanagar/Nasik District submitted that stated increase of 8% for Advertisement and Hoardings is too low and their tariff should be increased further. Also, tariff hike for Railways should be 37% instead of 31% as Railways are running in profit.

Shri Shaikh Yusuf Mohammad suggested that BPL limit should be increased to 50 units per month. Further, MSEDCL may increase fixed charges and energy charges for BPL category.

Promoters and Builders Association, Nasik, Goel Raisoni Associates and Promoters and Builders Association of Kolhapur pointed out that construction activity extends up to 2-3 years and suggested for levy of commercial tariff instead of temporary tariff for such construction activity.

Many Municipal Corporations, Nagarpalikas and local bodies submitted that electricity used for lighting at public places, viz., Schools, Gardens, Traffic Signals, and Libraries etc. should be charged at subsidized tariff instead of commercial tariff.

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Finolex Industries Ltd. and Associated Capsules Pvt Ltd. requested the Commission to review temporary supply charges as these are approximately three times the cost of power purchase. They submitted that separate tariff category for mixed use for large residential/commercial/IT and industrial complexes drawing power at single point is necessary to be introduced in new tariff structure to meet changing demand of urban development. Energy charges can be billed as per specified category by installing the meter and MD should be charged on proportionate basis. The tri-party agreement facility should be available for HT consumers who want to utilize supply for different categories from single point of supply. They requested the Commission to remove clause of 75% of highest billed demand during preceding 11 months for computation of demand charges and suggested that, if required, penalty may be recovered for that particular month with higher penal rate. They proposed that tariff philosophy should be based on average losses in respective Circles.

Kolhapur District Dalap-Kandap Girni Malak Sangh objected to any increase in fixed charges and energy charges for flour mills, and levy of ASC on flour mills in MIDC areas.

Shri Balaji Dyeing & Bleaching Mills pointed out that CPP with wind mills are reimbursed for their own consumption at non-costly rate whereas costly power rate is applied to them for consumption of excess units.

Kudal MIDC Industries Association stated that tariff of public water works should be made applicable to MIDC water supply systems also.

Shri N. Ponrathnam pointed out that there is no provision in EA 2003 and the Commission's Tariff Regulations to create separate category for Advertisement & Hoardings and Malls & Multiplexes, and these consumers should fall under commercial category.

MSEDCL's reply

MSEDCL has not given any specific response to these objections/suggestions.

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Commission's Ruling

The rationalisation of tariff categories and tariffs applicable to various consumer categories has been elaborated in Section 6 of this Order, while elaborating the tariff philosophy adopted by the Commission for determining the category-wise tariffs.

As regards creation of a separate tariff category for taking bulk supply at single point and further sub-distribution to mixed loads, the Commission has already clarified in previous Tariff Orders that taking bulk supply at single point and supplying further to individual dwellings is legal only in case of Group Housing Societies, and in case there are other loads, such as commercial, industrial, etc., the same cannot be supplied through the same connection. Separate individual connections will have to be taken for such loads, as it is possible to supply to such consumers after taking supply at single point, only in case the supplier has a distribution licence or has been appointed as a franchisee by the distribution licensee. In case of franchisee, the consumer remains a consumer of the licensee, and all the obligations and duties of the licensee continue to vest with the licensee. As regards appointment of the franchisee and the tariff for supply to the franchisee at single point by the licensee, the same has to be addressed by the licensee through an appropriate process, as the franchisee, being only an agent of the licensee, is not regulated by the Commission.

2.14. TARIFF REDUCTION FOR MPECS

VIA, NIMA, MIDC Industries Association, Amravati and many other consumers strongly objected to MSEDCL's proposal to reduce tariffs for MPECS because of non realization of revenue by MSEDCL and submitted that other consumers should not be burdened on account of subsidized tariff to MPECS; instead, power supply to MPECS should be disconnected due to non-payment of arrears.

NIMA submitted that MPECS is a separate distribution licensee and should be asked to purchase power on its own. NIMA added that MPECS should not be supplied power till they clear their dues. In case MSEDCL wants to supply power to MPECS, it should be billed at existing tariff and the difference should be compensated by the GoM. NIMA stated that MPECS cannot enjoy at the cost of industries and general public. Shri S. R. Paranjape opined that the process of reduction of cross-subsidies to move all tariffs towards actual cost of supply should not be halted or reversed if any consumer is defaulting.

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Karanja Industries Association submitted that reduction of tariff of a customer because of non-payment of dues would create a precedent which can have extremely severe long term implications apart from creating a feeling of frustration and anguish in the minds of consumers who are honest, and requested the Commission to disallow MSEDCL's proposal and to apply the same tariff increase to MPECS that is proposed for other categories. Grahak Panchayat, Nagpur suggested that recovery of the arrears should be appropriated by attachment of movable and immovable assets of MPECS.

MPECS submitted that it is entirely dependent on MSEDCL for its bulk power requirement. Further, MPECS opposed bulk supply tariff proposed by MSEDCL because the same is not viable and requested the Commission to determine feasible tariff for MPECS while truing up for FY 2006-07 and FY 2007-08. MPECS requested the Commission to consider the Rural Electricity Policy while determining the bulk supply tariff for MPECS.

MSEDCL's Response

MSEDCL submitted that the consumer mix of MPECS is predominantly agricultural and domestic; just like any other rural area of the State. MSEDCL has proposed a tariff reduction in the MPECS tariff structure to avoid discrimination among the consumers in the MPECS licensed area from rest of the State.

Commission's Ruling

MSEDCL had proposed to reduce the tariff to MPECS by 50%. Keeping in view the fact that MPECS is an embedded distribution licensee within MSEDCL licence area, and has a predominantly agricultural mix of consumers, and is also subjected to load shedding in accordance with the prevailing load shedding protocol for that region, the Commission has reviewed the matter and reduced the tariff applicable to MPECS, though not to the extent proposed by MSEDCL. Further, in accordance with the Judgment of the Honourable Appellate Tribunal for Electricity (ATE) on the Appeal filed by MPECS against the Commission's Tariff Order for MPECS, the Commission rules that MSEDCL should install meters capable of recording the Simultaneous Maximum Demand (SMD) at all the energy interchange points with MPECS, and levy demand charges on MPECS on the basis of the recorded SMD, rather than on the arithmetic summation of the demand at all the 22 energy interchange points.

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2.15. STANDBY/DEMAND CHARGES FOR CPP

VIA and Finolex Industries Ltd. submitted that MSEDCL's proposal to levy penal charges of 2.5 times prevailing HT tariff for planned shutdown and three-times prevailing HT tariff for unplanned shutdown is against the NTP and it discourages the consumer from opting for installation of CPP. VIA proposed that demand exceeding contract demand or agreed stand-by demand should be charged at 1.5 times the prevailing HT tariff during planned shut down and two-times prevailing HT tariff during unplanned shut down. VIA requested the Commission to charge penalty on hourly basis for exceeding the demand during planned shutdown.

Lloyds Steel Industries Ltd. stated that demand recorded over and above the sum of contract demand and standby demand should not be penalized as it happens only during break down of CPP and in case of use of standby demand by CPP, demand charges on standby component actually used should be charged on daily basis, instead of present method of charging for the complete month.

Tata Motors submitted that stand-by charges received from TPC, REL and BEST should be reflected in MSEDCL's balance sheet and should be considered for calculation of revenue from sale of power. Shri N. Ponrathnam requested the Commission to encourage CPP generation by removing surcharge on power production giving reasonable cost for the power supplied to the grid.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

Commission's Ruling

The standby charges received from the Mumbai licensees, viz., REL-D, BEST and TPC-D, amounting to Rs. 396 crore annually, has been considered as income for MSEDCL, and has been considered while determining the revenue gap.

As regards charging for standby demand, in excess of Contract Demand, the same will be chargeable as stipulated in the Commission's Tariff Schedule, i.e., penal demand charges of 1.5 times the prevalent demand charges for the excess portion of demand, in addition to the demand charges levied on the entire recorded demand, which in effect means that the excess portion of demand will get levied 2.5 times the normal demand charges in

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totality. The demand charges are applicable for the entire month, and cannot be applied for certain hours of the month, since the maximum demand once recorded, remains as the recorded demand, till such time it is exceeded during the same month.

2.16. VOLTAGE-WISE COST OF SUPPLY

VIA submitted that MSEDCL has not provided the details of cost of supply for different consumer categories and different voltages of supply and proposed that cost of supply should be assessed considering all the aspects including technical losses for supplying energy to different categories of consumers. VIA added that the correct level of cross-subsidy could be arrived at after computation of realistic cost of supply. VIA, TBIA and other HT consumers stated that cost of supply is dependent on the voltage level and cannot be same for all the categories of consumers and requested the Commission to determine the tariff for different categories of consumers based on voltage level cost of supply. The HT category and EHV categories should be segregated and EHV tariff should be less than HT tariff, similarly, HT tariff should be less than LT tariff.

HINDALCO referred to Section 62 (3) of EA 2003, and requested the Commission to direct MSEDCL to submit voltage-wise tariff proposal for the Commission's approval.

Bharat Forge Ltd. and Kalyani Carpenter Special Steels Ltd. pointed out that EHV consumers are connected on intra-State Transmission System fed by MSETCL, their operation and maintenance is carried out by MSETCL and not by MSEDCL and suggested that a separate tariff category should be created for EHV consumers and submitted that basic tariffs should be based on various voltage levels at which consumers are supplied with power:

- a) Low voltage consumers supplied up to 440 volts.
- b) High voltage consumers supplied at 11/22/33 kV.
- c) Extra High voltage consumers supplied at 100 kV and above.

The Institution of Engineers (India), Nashik Local Centre submitted that T&D losses should be segregated as per voltage level, i.e., 132 kV, 66 kV, etc., and EHV consumers should not be burdened with heavy tariff, instead, EHV discount structure should be formulated by the Commission.

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MSEDCL's Response

MSEDCL submitted that audited accounts for voltage-wise assets are not available. However, based on engineering estimate of its assets, MSEDCL has arrived at the voltage wise segregation of costs. MSEDCL stated that the value of assets is considered as per the opening gross fixed assets at the beginning of the year. MSEDCL added that the projection for FY 2007-08 and FY 2008-09 has been made by considering the same proportion as in FY 2006-07. MSEDCL admitted that since audited accounts are not maintained on the basis of voltage-wise assets segregation, it is difficult for MSEDCL to arrive at voltage-wise Cost of Supply and assured that it would arrange for the same in due course of time.

Commission's Ruling

MSEDCL should make strenuous efforts to capture the required voltage-wise data, in order to enable it to compute the voltage-wise cost of supply at the earliest. MSEDCL has determined the voltage-wise asset base, using some allocation methodology, to determine the voltage-wise wheeling charges. The same could be used as a starting point, and further refined to ensure that the voltage-wise costs are getting captured appropriately. For the purpose of this Order, the Commission has determined the tariffs vis-à-vis the average cost of supply.

As regards the voltage-level losses, while the transmission losses (above 33 kV voltage) and distribution losses have been segregated, the further break-up of distribution losses for different voltages at which MSEDCL is operating, viz., 33 kV, 22 kV, 11 kV, 440 V, etc., and break-up between technical and commercial losses has not been submitted by MSEDCL. MSEDCL should make all efforts to compile this data by undertaking the necessary studies, and submit the same to the Commission.

2.17. NON TARIFF INCOME

NIMA presented that non-tariff income should be utilized for repairs and maintenance expenses and staff expenses. Garware Industries Ltd. suggested that non-tariff income should be utilized by MSEDCL for improving the distribution network, repair and maintenance, upgradation of the system, etc., and requested the Commission to include non-tariff income under the head of R&M and other expenses while determining tariff for FY 2008-09.

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Grasim Cement submitted that MSEDCL should explore the scope for providing technical services to other sectors to increase their income.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

Commission's Ruling

The Commission is of the view that the suggestion that the non-tariff income should be considered as a part of R&M income, etc., has no merit and no basis either. The Commission has considered the non-tariff income, while determining the revenue requirement to be recovered from sale of electricity, in accordance with the Commission's Tariff Regulations.

2.18. INCOME TAX

Vidarbha Iron & Steel Corp. Ltd. submitted that MSEDCL has not made any provision towards Minimum Alternate Tax (MAT) in its annual audited accounts of FY 2006-07 and requested for MSEDCL's clarification in the matter. They pointed out that as per the MAT Regulations, provision for Tax is required only when there is book profit as per the audited accounts drawn as per Schedule VI of the Companies Act and submitted that MAT provision should be considered as pass through.

MSEDCL's Response

MSEDCL has not given any specific response to this objection.

Commission's Ruling

For FY 2006-07 and FY 2007-08, MSEDCL has not paid any income tax or advance income tax, and hence, the Commission has considered the income tax as nil in these years. For FY 2008-09, the Commission has retained the income tax at the same level approved by the Commission in the MYT Order, and the same will be trued up based on actual tax paid by MSEDCL at the end of the year.

2.19. FUEL ADJUSTMENT CHARGE (FAC)

Indian Railways and NMC requested the Commission to exempt Railways and Municipal Corporations, respectively, from payment of Fuel Adjustment Charges.

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Arvind Cotspin submitted that MSEDCL has no control over implementation of FAC, thereby increasing additional burden on consumers month by month. Jay Maharashtra Magasvargiya Co-op. Spinning Mills Ltd., Islampur stated that industries are unable to work out the costing of their products since the effect of FAC calculations are known only after bill generation.

Finolex Industries Ltd. suggested that there should be a cap on recovery of FAC, to the extent of Rs. 0.30 per unit. Prakash Fabricators submitted that FAC is exorbitantly high and applicability of these repetitive charges is incorrect and unjustifiable.

MSEDCL's Response

MSEDCL, in its submission during the Public Hearing, stated that tariff structure determines the base rate for variable cost of power purchase from MSPGCL, CGS and other sources, however, over the year, the prices would change because of change in fuel cost. FAC mechanism is designed to compensate for variation in fuel cost of MSPGCL, CGS and related deviation in actual power purchase cost. MSEDCL submitted that detailed monthly FAC calculation formats are available on its website www.mahadiscom.in.

Commission's Ruling

As ruled by the Commission in previous Order and in accordance with the Commission's Tariff Regulations, FAC charges are payable by all consumer categories, without any exception. FAC charges, which could be positive or negative, are levied to pass through the variation between the actual fuel cost and the fuel cost considered by the Commission for estimating the power purchase expense while determining the ARR and tariff. Further, the Tariff Regulations stipulate the ceiling (cap) on recovery of FAC as 10% of the variable component of tariff levied on the consumers.

2.20. REFUND OF REGULATORY LIABILITY CHARGES (RLC)

VIA suggested that RLC refund should be shown separately in the tariff of subsidizing consumers and the burden of RLC expenses should not be loaded on the consumer categories who have provided the same otherwise it would be a great injustice to them. TBIA and NIMA stated that RLC is a loan given to MSEDCL by industrial and commercial consumer categories and the same should be refunded to them immediately and it should not be linked with reduction of T&D losses. NIMA submitted that

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MSEDCL has not followed the Commission's Orders to refund RLC, which should be considered as Contempt of Court and no further Petitions should be admitted by the Commission. They added that MSEDCL should refund the RLC amount along with interest.

TSSIA, COSIA submitted that MSEDCL is playing legal tricks to prolong refund and using RLC amount without paying any interest and requested the Commission not to allow tariff revision till RLC is refunded back to the consumers. Tata Motors pointed out that in certain zones MSEDCL has managed to bring down the distribution losses and suggested that MSEDCL should start refund of RLC on the basis of loss reduction performance achieved by different zones, which would act as a benchmark for other regions to follow.

Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge submitted that the Commission in its previous Orders has ruled that RLC is a loan given by consumers and added that repayment of loan is not an expense and should not be added in the ARR as contended by MSEDCL. They suggested that MSEDCL should submit a fixed time bound plan for refund of the RLC amount to the consumers. Vidarbha Iron & Steel Corp., R. L. Steels Pvt. Ltd. and many other consumers strongly objected to MSEDCL's refusal to refund RLC on account of loss levels being higher than target loss levels and submitted that RLC must be refunded to the consumers.

ISPAT submitted that delay in refund of RLC would result in new consumers of MSEDCL getting better benefit during refund of RLC, compared to the existing consumers who are desirous of reducing their contract demand and consumption. ISPAT added that the consumers who commission their own captive power plants in near future would stand to lose as their RLC refund would be much lower as the contract demand from MSEDCL will be reduced and it would discourage initiatives of industries to establish captive power projects. ISPAT proposed that 18% interest per annum should be imposed on the amount payable by MSEDCL from the date of receipt of RLC from individual consumer.

Arvind Cotspin requested the Commission to reduce tariffs by Rs. 0.50 per unit till full and final recovery of RLC. Shri Prakash Jaiswal proposed that RLC should be treated as an advance or deposit being paid to MSEDCL and should not be treated as part of the tariff. Maharashtra Rajya Veej Grahak Sanghtana submitted that provision of RLC refund

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through ARR would be injustice to the consumers, as subsidizing consumers would get less refund and would be burdened by tariff hike.

MSEDCL's Response

MSEDCL submitted that the issue pertaining to Regulatory Liability Charges is subjudice. The Appellate Tribunal vide its Order dated January 23, 2008 directed the Commission to admit the review Petition of MSEDCL. In view of ATE judgment, MSEDCL has submitted its review Petition dated September 24, 2007 to the Commission on February 6, 2008 and the Commission has issued an Order in the matter on April 2, 2008.

Commission's Ruling

The Commission, in line with its directions in the Order dated April 2, 2008 in Case No.s 47 and 92 of 2007 on the Review Petition filed by MSEDCL on the issue of refund of Regulatory Liability Charges (RLC), has considered a refund of RLC of Rs. 500 crore in FY 2008-09 to be refunded to the specified consumer categories, out of the total amount of around Rs. 3227 crore collected by MSEDCL through RLC over the period from December 2003 to September 2006, which were like a loan given by these subsidizing categories to help MSEDCL tide over the financial crisis due to its heavy distribution losses. This is only a token amount, amounting to around 16% of the RLC collected from the selected consumer categories. It is expected that with progressive improvement of MSEDCL's operations in future years, the balance amount will be refunded in the near short-term. This refund amount of Rs. 500 crore has been added to the ARR of MSEDCL for FY 2008-09, and will thus be recovered from all the consumers of MSEDCL. The methodology of RLC refund to individual consumers has been detailed in Section 6 of this Order on Tariff Philosophy.

2.21. RECOVERY OF ARREARS AND BAD DEBTS

NIMA and Vidarbha Chamber of Commerce & Industry submitted that MSEDCL is unable to recover its arrears due to its inefficiency, mismanagement, aimless manpower and lack of accountability and if efforts are taken to recover the outstanding amount, there would be no need to increase the tariffs. Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge submitted that bad debts are controllable and requested the Commission to provide mechanism of sharing of gains and losses in its Tariff Order for non-recovery of bad debts.

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Shri Girish Kulkarni pointed out that MSEDCL disconnects electric supply of defaulting consumers without proper legal notices, thereby affecting recovery of arrears. Audhyogik Shetkari Sanghtana, Jalgaon and The Institution of Engineers (India), Nashik Local Centre, suggested that the list of debtors should be published along with reasons for non-recoverable amounts and actions proposed on concerned officers.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

Commission's Ruling

There is no doubt that MSEDCL's arrears are very high, and MSEDCL should take all efforts to recover the arrears and bad debts, which will go a long way to improve MSEDCL's liquidity position. However, since the amount billed has already been considered as revenue in earlier years, except for normative provisioning for bad debts, there is no need for considering any sharing of gains and losses due to controllable factors on this account, as suggested by the objectors.

The Commission has considered the provisioning for bad debts as 1.5% of revenue, in accordance with the Commission's ruling in this regard in the past.

2.22. BILLING

NIMA submitted that MSEDCL's billing format is too complicated and to read and understand the bill is beyond the intelligence of the common person and suggested that the same should be simplified. MCCIA suggested that system of penalizing MSEDCL for not following Standards of Performance (SOP) parameters should be interlinked to the billing system directly with the help of IT department, i.e., the time taken for restoring the power supply may be connected to the billing system to provide required compensation to the consumer.

Shri Sachin Bhise pointed out that monthly meter reading cycle is not followed properly by MSEDCL staff thereby affecting monthly recorded consumption, which might change the billing slab of the consumer. Maharashtra Rajya Veej Peedit Grahak Sanghtana, Latur suggested that independent third party audit of MSEDCL's billing procedure should be undertaken. Akhil Bhartiya Grahak Panchayat Nasik Mahanagar/Nasik District submitted

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that there are many abnormalities in MSEDCL's billing software and cases of wrong billing put the consumer to hardships thereby delaying revenue recovery. Maharashtra Rajya Veej Grahak Sanghatana pointed out that approx. 29.31 Lakh consumers are billed on the basis of average billing due to faulty meters, incorrect meter readings, etc.

MSEDCL's Response

MSEDCL has submitted that it is taking massive efforts to improve its billing system.

Commission's Ruling

MSEDCL should take note of the genuine difficulties faced by the consumers in interpreting the bills issued by MSEDCL, and ensure that the bills are simplified to the extent possible, while at the same time, ensuring that all the relevant and mandatory information is conveyed in an appropriate manner. MSEDCL should also ensure that the Commission's Orders and Regulations as regards billing are followed strictly, in letter and in spirit.

2.23. QUALITY OF SUPPLY/SERVICE

TBIA submitted that regular power trippings and voltage drops cause serious production loss and damage to the equipments and instruments and suggested that capacitors should be installed in the distribution network to improve the quality of supply. TBIA and Vidarbha Chamber of Commerce & Industry submitted that MSEDCL's distribution network has not been augmented and added that there is a serious mismatch between the load growth and infrastructure to cater to the consumer demand. MSEDCL should regulate load to control grid frequency. TBIA suggested that HVDS and LTLMS should be introduced to reduce the technical losses.

NIMA pointed out that MSEDCL has spent a huge amount on capacitor installation; however, most of the capacitors are not functioning. They added that disturbance of power supply even for fraction of a second affects the plant operation. Each tripping and subsequent start-up causes huge losses, results in off-spec production, waste generation and endangers safety of equipment and environment. Tata Motors stated that MSEDCL has not shown any signs of seriousness in implementing the Commission's directives in the real sense and in a time-bound manner. Further, it has not honoured its commitments to improve its efficiency so that cost effective and quality power supply is made available to its consumers. They strongly objected to the tariff hike as MSEDCL is unable to

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provide quality, reliable and uninterrupted power supply and submitted that industries often experience problems of frequent load shedding, voltage fluctuations, low voltage, under frequency, etc.

NMC and The Institution of Engineers (India), Nashik Local Centre submitted that different parameters such as SAIFI, SAIDI, etc., should be strictly monitored by MSEDCL for maintaining quality supply to consumers. They further submitted that distorted waveforms are observed in MSEDCL's power supply and there is no restriction on THD Harmonics.

Shri Tushar Bhartiya pointed out that approx. 3675 farmers have applied for agricultural connection, out of which only 192 connections have been released by MSEDCL till date. Grahak Panchayat, Anjangaon Surji pointed out that the consumers are unable to avail the benefit of prompt payment discount as the bills are delivered very late. Akhil Bhartiya Grahak Panchayat Nasik Mahanagar/Nasik District suggested the need for effective consumer grievance redressal system to build up confidence amongst the consumers for maintain cordial relations with MSEDCL. Grasim Cement submitted that MSEDCL must improve the quality and reliability of power for industrial consumers where operations are critical.

Shetkari Mahila Sahakari Vastranirman Soot Girni Ltd., Sangole pointed out that even consumers under express feeders suffer from frequent interruption of supply. Finolex Industries Ltd. suggested that MSEDCL should at least maintain 220 KV feeders and associated switchgears in a healthy condition. TIMA pointed out that MSEDCL has no preventive maintenance schedule and stand by arrangements. Shri N. Ponrathnam submitted that MSEDCL should maintain higher power factor as cost of auto power factor correction panel is included in Capital Expenditure schemes approved by the Commission.

MSEDCL's Response

MSEDCL submitted that it has taken initiatives to establish 'Customer Care Call Centres' in 15 Municipal Corporation areas, to deal with the consumer complaints and supply related problems, which would be useful for following purposes:

- 1) Improvement in supply related complaint handling process and enhancement of customer servicing capabilities
- 2) 24 hours assistance

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3) Single co-ordinating agency to monitor the complaint resolution mechanism

Commission's Ruling

MSEDCL has recently commenced submission of monthly reports on reliability indices such as SAIDI, CAIDI, etc., at the circle level, which are being analysed by the Commission. In the meantime, MSEDCL has been directed to submit these reports at the divisional and sub-divisional levels, so that the reliability standards at the ground level can be assessed. MSEDCL has also been directed to ensure that the load shedding hours are not included under the reliability indices, so that the true performance can be assessed. Based on the analysis, in future, the Commission will stipulate the reliability indices to be followed by MSEDCL.

2.24. DATA DISCREPANCY/ INSUFFICIENCY

Tata Motors pointed out that MSEDCL has indicated two different figures for total power purchase expenditure for FY 2006-07, viz., Rs 14925 Crore on page no. 2 of 30, Vol. I, and Rs. 14908 Crore on page no. 26 - Annexure 8 of Balance Sheet. Further, MSEDCL has indicated two different figures for depreciation expense, viz., Rs. 608 Crore on page no. 2 of 30 and Rs. 502 Crore on page no. 13, Annexure 8. Tata Motors requested the Commission to reject MSEDCL's Petition on the ground of submission of incorrect data and reconsider the same only after authentic data is made available to the Commission and Public.

Shri S. R. Paranjape submitted that there are considerable variations in the information supplied by MSEDCL in various Tariff Petitions over the years, and requested the Commission to direct MSEDCL to submit a detailed explanation for these differences. Further, he added that a Committee of experts should be appointed to validate the explanations after entire scrutiny of the original records as incorrect information may invalidate the Tariff Orders issued by the Commission. Veej Grahak Samiti, Nasik and Maharashtra Rajya Veej Grahak Sanghatana also stated that significant discrepancies are observed in data submitted by MSEDCL.

MSEDCL's Response

MSEDCL confirmed that all the figures and computations provided in its Petition are correct. Tariff revision computations have been made in accordance with the tariff philosophy elaborated in the Petition. MSEDCL stated that the tariff computation model

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has also been provided along with the Petition in soft copy, which can be cross checked by interested stake-holders.

Commission's Ruling

The Commission has considered the figures of expenditure and revenue after getting them reconciled by MSEDCL.

2.25. NON COMPLIANCE WITH COMMISSION'S ORDERS AND DIRECTIVES

VIA submitted that MSEDCL has violated directives issued by the Commission under its MYT Order dated May 18, 2007, in the matter of submission of certain data, few of which are listed as below:

- a) Feeder-wise energy related information
- b) Metering arrangement for HT V commercial consumers requiring single point supply
- c) Details such as number of consumers, consumption, and revenue, separately for all sub-categories under temporary connections, such as LT religious, LT agriculture, LT Others, and HT sub-categories
- d) Separate accounts for wires business and supply business
- e) Voltage-wise segregated wires cost

Prayas suggested that the Commission should punish MSEDCL under Section 142 of EA 2003, for non compliance of directives issued by the Commission related to metering at feeder, distribution transformer and sub-station level. TBIA submitted that the consumer has to bear the brunt of MSEDCL's inefficiency and non-performance as well as non-adherence to the Orders of the Commission, particularly regarding fiscal discipline and purchase of power from non-costly sources of power.

Shetkari Vinkari Sahakari Soot Girni Ltd., Islampur suggested that the Commission should not admit MSEDCL's tariff proposals, if MSEDCL fails to comply with directives issued by the Commission under its previous Tariff Orders. Shri N. Ponrathnam pointed out that the Commission, vide its Order dated January 10, 2006, in the matter of revision in the Principles and Protocol for Load Shedding, directed MSEDCL to take short-term and long-term measures to reduce load shedding, and submitted that MSEDCL has not complied with many of the directions issued by the Commission.

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Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge submitted that the Commission intended to move towards a feeder-wise approach for energy accounting as well as for load shedding protocol and directed MSEDCL to ensure necessary DTC metering and feeder metering, however, MSEDCL has completed only 45% DTC metering till date, further, it has not given programme for completion of DTC metering.

MSEDCL's Response

MSEDCL has not given any specific response to these objections.

Commission's Ruling

The Commission expresses its displeasure with the efforts put in by MSEDCL to comply with the directives of the Commission. While MSEDCL has complied with certain directives, there are quite a few directives, where the compliance is in name only. MSEDCL should ensure compliance with the directives, both in letter and in spirit. The Compliance Monitoring cell set up by the Commission is monitoring the compliance of various directives on a periodic basis.

2.26. TRUING UP FOR FY 2006-07

VIA strongly objected to the allowance of excess expenditure under truing up procedure as MSEDCL has not restricted its expenses to the figures approved by the Commission. VIA submitted that controllable expenses should not be allowed as pass through under truing up. For controllable factors, consumers should be charged only one-third of the amount of such losses, and the Licensee, as per the provisions of Tariff Regulations, should absorb the balance amount of the loss. VIA pointed out that MSEDCL's power purchase expenditure has increased because of short fall in actual generation of MSPGCL, due to which, MSEDCL had to source power from costly sources, viz., Kawas and others and requested the Commission to recover these charges from MSPGCL.

Prayas submitted that all the costs and expenses related to operations and maintenance are controllable in nature. Truing-up of these expenses merely on the basis that they appear so in the audited records, defeats the purpose of the MYT regime. Prayas requested the Commission to treat all these expenses as controllable, which would act as a disincentive for MSEDCL to deviate from the approved budgeted amounts and hence,

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compel it to plan and spend accordingly. Prayas submitted that additional provisioning due to earned leave encashment has occurred due to change in accounting to accrual basis from earlier cash basis. Since the deviation from the approved figure is on account of change in accounting standards, the effect of the same should not be passed on to the consumers in one year, instead, the impact should be spread over three years to avoid any tariff shock. Prayas pointed out that MSEDCL has not considered disallowance of Rs. 96 Crore due to second staggering day for industrial consumers and requested the Commission to deduct the same while truing up for FY 2006-07.

Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge submitted that surplus IASC should be refunded to consumers who contributed to ASC and IASC. Prayas stated that after restructuring of MSEB, combined O&M expenses of four successor Companies has increased substantially, which defeats the basic purpose of restructuring. Moreover, these are controllable costs and are not eligible for true up. Prayas requested the Commission not to allow truing up of excess O&M expenditure. Prayas suggested that interest on ongoing projects has to be capitalized as per the accounting practice and submitted that there would not be any necessity for working capital loans if MSEDCL improves collection efficiency and recovers accumulated dues.

Vidarbha Iron & Steel Corp. Ltd. submitted that MSEDCL has not included the expenses on account of transmission charges under the truing up for FY 2006-07, which should be reviewed and corrected. They submitted that MSEDCL should not claim truing up on account of advance against depreciation for the loan payments related to liabilities of State Government Bonds, loan from power Finance Corporation and other repayments under central plan allocation. R. L. Steels Pvt. Ltd. objected to the truing-up exercise as MSEDCL uses it as a back-door method to recover expenses disallowed through earlier Tariff Orders.

Karanja Industries Association and several other objectors submitted that main reason for revenue deficit in FY 2006-07 is the huge increase in employee costs and submitted that this increase is in the nature of accounting adjustment only and does not have any cash impact. They suggested that this expenditure should be accounted on actual basis only, while a notional liability account may be created to meet statutory accounting norms, which would reduce the actual revenue deficit for FY 2006-07 significantly. Garware Industries Ltd. submitted that the reasons provided by MSEDCL for increase in R&M expenditure are not justified as they should recover the cost for shifting of lines and

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cables from organisations like MMRDA, etc., which are responsible for the same becoming necessary.

Lloyds Steel Industries Ltd. and Maharashtra Rajya Veej Grahak Sanghtana submitted that truing up should be allowed only on uncontrollable expenses and increase in controllable expenses, viz. employee cost, bad debts, interests, etc., should not be allowed as pass through.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

Commission's Ruling

The Commission has undertaken the truing up of expenses and revenue of MSEDCL for FY 2006-07 in accordance with the Commission's Tariff Regulations and the Commission's earlier Orders in this regard. The Commission's analysis on the truing up of expenses and revenue for FY 2006-07, has been detailed in Section 4 of this Order.

2.27. TRUING UP FOR FY 2007-08

TBIA submitted that the revenue gap of Rs.403 Crore projected by MSEDCL for FY 2007-08 is incorrect as additional revenue of Rs. 334.59 Crore received from sale of 903 MU has not been accounted for by MSEDCL. Further, revenue subsidies and grants receivable for FY 2007-08 is Rs. 623 Crore, creating surplus of Rs. 554.59 Crore for FY 2007-08. TBIA pointed out that during FY 2007-08, MSEDCL has purchased lower quantum of non-costly power and higher quantum of costly power, resulting in increase in overall power purchase cost. TBIA requested the Commission not to allow additional costly power purchase expenditure. Further, they submitted that MSEDCL should clarify the issues raised by their Auditor.

Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge submitted that MSEDCL has estimated total power purchase of 40931.6 MU for the period from October 2007 to March 2008 in comparison to actual power purchase of 36016 MU for the period from April 2007 to September 2007 and requested for the explanation of the same. They submitted that MSEDCL has sought increase of Rs. 269 Crore in O&M expenses for FY 2007-08. MSEDCL is creating new Circles and Divisions, which increases O&M expenses. There is no benefit of creating new Circles and Divisions, since MSEDCL has

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utterly failed to control theft of electricity. They requested the Commission to make realistic estimation while truing up of O&M expenditure for FY 2007-08.

ISPAT submitted that MSEDCL should have provided actual expenses till December 2007 as the ARR for FY 2007-08 has been submitted in February 2008.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

Commission's Ruling

The Commission has undertaken the provisional truing up of expenses and revenue of MSEDCL for FY 2007-08 in accordance with the Commission's Tariff Regulations and the Commission's earlier Orders in this regard. The Commission's analysis on the truing up of expenses and revenue for FY 2007-08, has been detailed in Section 5 of this Order.

2.28. FIXED CHARGES

Karanja Industries Association objected to the steep increase in fixed charges proposed by MSEDCL, which is on account of MSEDCL's infrastructure expenditure proposed to be undertaken in the next two years. BOSCH, AIMA and several other consumers also opposed the proposed increase in fixed charges.

Shri Girish Kulkarni proposed that the fixed charges should be aligned with the load shedding protocol and submitted that consumers facing higher load shedding should be relieved of fixed charges. Grahak Panchayat, Anjangaon Surji and Maharashtra Electricity Consumers Association submitted that MSEDCL is levying fixed charges for 24 hours supply even if the power is available only for 8 to 12 hours in certain areas. The fixed charge should be levied on the basis of hours of power availability, i.e., fixed charges should be reduced in proportion to the failure to supply.

Solapur Oil Mills Owners Association submitted that the burden of fixed charge is unbearable for industrial consumers working only in one or two shifts. Jay Maharashtra Magasvargiya Co-op. Spinning Mills Ltd., Islampur suggested that fixed charges should be levied on the consumers who are under utilizing/overdrawing energy thereby deviating from stipulated demand. Variation in drawal should be penalized and flat fixed.demand charges should not be collected from all the consumers.

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Royal Preservations, an Ice Plant, requested the Commission to withdraw fixed charges for seasonal industries. Marathwada Association of Small Scale Industries and Agriculture pointed out that fixed cost becomes a major burden if the industry's consumption reduces and suggested that higher fixed charges must be compensated by reduction in energy charges. Maharashtra Paper & Board Manufacturers Association, Aurangabad submitted that instead of proposing increase in fixed charges, MSEDCL should supply more electricity to recover its fixed cost.

MSEDCL's Response

MSEDCL submitted that total expenditure as computed and provided in APR Petition has two components; variable component and fixed component. Variable component accounts for the expenditure, which varies as per the availability of power, viz., power purchase expenses, transmission charges, etc., whereas fixed component is one which is spent even in case of non-availability of power, viz., O&M expenses, depreciation, interest, finance charges, etc. MSEDCL stated that only 49.2% of fixed expenditure is compensated by fixed charges levied on the consumers, and revenue from fixed charges comprises only 23.6% of the total revenue at the proposed tariff. MSEDCL added that it is difficult to discharge its daily duties as total fixed expenditure is not recovered fully from levy of fixed charges.

Commission's Ruling

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. Since the energy charges have been correspondingly increased, if MSEDCL ensures adequate supply of electricity to the relevant consumer categories, there will be no loss to MSEDCL on this account. 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

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when sufficient power is available and contracted by the licensees, they can approach the Commission for a suitable review.

2.29. RELIABILITY CHARGE – PUNE MODEL

Baner Mohalla committee, Salunke Vihar Road Area Mohalla Committee and several other consumers of Pune submitted that MSEDCL has not provided any details of allocation of costly and non-costly power to Pune city and opined that Pune city is getting lower share of non-costly power as compared to the rest of Maharashtra. They requested the Commission to determine a power distribution protocol for equitable distribution of non-costly power to consumers with no discrimination between different consumers or category of consumers.

Shri Girish Kulkarni objected to the CII Pune model of zero load shedding, whereby additional power is made available to consumers of Pune and compensated by levy of reliability charge, and submitted that such discrimination is against the principles of equality.

MSEDCL's Response

MSEDCL has not given any specific response to these objections.

Commission's Ruling

As stated earlier, the Commission has removed the concept of classifying the power purchased as costly and non-costly, and hence, the issues raised by the objectors in this regard no longer have any relevance. As regards the merits of CII Pune model and other models of ensuring zero load shedding in certain areas based on the initiative taken by the local people, the same is not the subject matter of this Petition.

2.30. REVENUE GAP AND ANNUAL REVENUE REQUIREMENT (ARR)

VIA pointed out that MSEDCL has appointed a franchisee for three divisions of Nagpur Urban Circle and has projected a gain of Rs. 40.63 Crore in the first year, i.e., FY 2008-09, which is additional revenue, and should have been considered in the ARR for FY 2008-09.

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TBIA submitted that revenue gap proposed by MSEDCL is incorrect. The revenue shortfall for FY 2007-08 and FY 2008-09 does not exist; instead, there is surplus of Rs. 554.59 Crore available for FY 2007-08 and Rs. 1234 Crore available for FY 2008-09. TBIA requested the Commission to reduce tariffs considering additional revenue of Rs. 1788.59 Crore earned during past two years. R. L. Steels Pvt. Ltd. requested that the Commission should scrutinize the accounts submitted by MSEDCL and it should be audited through a Chartered Accountant appointed by the Commission.

Kolhapur Engineering Association, Association for Hundred Percent Export Oriented Spinning Units, Kolhapur and many other consumers objected to the revenue figures submitted by MSEDCL, which shows reduction in revenue in FY 2008-09 despite projected increase in sales and associated reduction of distribution losses. Shri Sandeep Patil also objected to the projected reduction in revenue, despite increase in collection efficiency, consumer demand and proposed upcoming generation from various sources. Garware Industries Ltd. requested the Commission to direct MSEDCL to consider subsidy received from State Government while determining tariff for FY 2008-09. Grasim Cement suggested that additional claims and pending claims should be allowed only when MSEDCL is in a healthy position. They added that MSEDCL has not projected the income of wires business, which would be recovered from open access users. Further, MSEDCL has not submitted separate accounts of wires business and supply business.

Prayas submitted that several claims of MSEDCL are unjustified and inappropriate, resulting in highly inflated revenue requirement. Proposed tariff increase of Rs.3319 Crore as projected by MSEDCL should be reduced to Rs. 467 Crore and tariff increase should not be more than 3%. Prayas pointed out that MSEDCL has considered revenue earned from franchisee and input energy to franchisee while estimating the revenue figures and submitted that the Commission has consistently taken a view that franchisee arrangement is an internal matter of MSEDCL and franchisee arrangement does not have any regulatory oversight. Prayas stated that allowing revenue earned by MSEDCL from franchisee would create a perverse incentive for the licensee and would be at the expense of consumers.

MSEDCL's Response

MSEDCL replied that total revenue gap after considering revenue shortfall for FY 2008-09 is Rs 3319 crore, which requires an average increase of 19.36% in existing tariff.

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MSEDCL submitted that the revenue gap needs to be recovered to maintain viability of business. MSEDCL added that tariff increase would have been around 27.39%, if MSEDCL had not reduced distribution losses to a large extent.

MSEDCL submitted that actual tariff increase required for meeting the estimated revenue gap for FY 2008-09 is very small as compared to the total tariff hike, as many other factors like pending claims, truing up for FY 2006-07 and the provisional truing up for the current year forms a significant portion of total tariff increase projected by MSEDCL.

Commission's Ruling

The Commission has determined the ARR and revenue gap for FY 2008-09 in accordance with the Tariff Regulations, and principles outlined in the MYT Order for MSEDCL, as detailed in Section 5 of this Order.

2.31. RETURN ON EQUITY (ROE)

VIA pointed out that the return on equity due to MSEDCL has increased due to equity allocation of Rs. 3083.93 Crore as opening balance for FY 2006-07 and submitted that it should not be loaded in ARR as it is not an expenditure incurred by MSEDCL. VIA stated that MSEDCL has considered 30% as equity contribution towards assets capitalized, however, with reference to Form F8 of APR Petition, the average capitalization of equity through internal accrual is only 13% and requested the Commission to reduce RoE accordingly.

Prayas, MGP and Maharashtra Paper & Board Manufacturers Association, Aurangabad pointed out that even though the final Transfer Scheme has not been approved, MSEDCL has increased the equity base to Rs. 3083.93 Crore from Rs. 2250 Crore. This was done as part of transfer of assets and liabilities from the erstwhile MSEB. They objected to the increase in RoE on account of increase in equity. Maharashtra Paper & Board Manufacturers Association suggested that RoE should be linked to the average hours of supply.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

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Commission's Ruling

The Commission has allowed RoE for FY 2008-09 in accordance with the Commission's Tariff Regulations, and considering the submissions made by MSEDCL in this regard. The Commission's analysis and computations in this regard have been elaborated in Section 5 of this Order.

2.32. REGULATORY ASSET FOR FY 2001-02

Prayas submitted that MSEDCL has claimed an amount of Rs. 1065 Crore in the context of High Court directive to consider creation of one-time Regulatory Asset for the uncovered gap for FY 2001-02. MSEDCL has worked out the implications of this directive by comparing the actual expenditure in FY 2001-02 and the expenses approved by the Commission and sought pass through of all the expenses as per the audited report. Prayas pointed out that the High Court, in its Judgment dated February 11, 2004, had held that the Commission needs to ensure that only properly incurred expenses, which reflect efficient operations, are passed on to consumers and submitted that all expenses cannot be passed on to consumers simply on the basis of audited report. Prayas added that appropriateness of the expenditure incurred by MSEDCL needs to be assessed while working out the quantum of regulatory asset, and certain expenditure considered by MSEDCL needs to be disallowed while computing the regulatory asset, which include,

- a) expenditure on power purchase from erstwhile Dabhol Power Corporation (DPC), which were not included in the original ARR and Tariff Petition of erstwhile MSEB, as MSEB had claimed that the power purchase bill was more than offset by the rebate claims raised by MSEDCL on DPC
- b) interest expense on loan taken by MSEB for investment in DPC Bonds, which has already been disallowed by the Commission in earlier Orders, on the basis that this investment constitutes unregulated business of MSEB, and
- c) in-adequate capitalization of interest and finance charges considered by MSEDCL, even though the High Court has accepted the Commission's method of capitalisation of interest expenses.

Vidyut Urja Equipments Ltd., Advocate Balaji Yenge and several other objectors submitted that actual true up cost of regulatory asset for FY 2001-02 is Rs. 539.36 Crore, however, MSEDCL is also claiming for Rs. 526 Crore at compound interest rate of 12% for six years, which is almost equivalent to true up cost and requested the Commission to

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scrutinize the High Court Order related to interest burden. Karanja Industries Association stated that under the Limitations Act, no business receivable may be required to be paid if it is not demanded within three years of such a receivable being created. Hence, any demand on this account is illegal and should be disallowed by the Commission. Karanja Industries Association added that if at all, such deficit needs to be recovered from consumers; its recovery in one year represents gross violation of natural justice since the amount has been pending for a span of at least 7 years.

MSEDCL's Response

MSEDCL has not given any specific response to these objections/suggestions.

Commission's Ruling

The Commission has taken note of the submissions made by Prayas and other objectors in this regard. The Commission's analysis and decision on the truing up of expenses and revenue for FY 2001-02, vis-à-vis erstwhile MSEB's original Petition for FY 2001-02 and the Judgment of the Honourable High Court, has been detailed in Section 3 of this Order.

2.33. METERING

TBIA submitted that the Commission in each of its Tariff Orders has directed MSEDCL to meter the consumption and also specified a time bound programme for completion of 100% metering. National Electricity Policy (NEP) also stipulates completion of 100% metering by March 31, 2007. However, MSEDCL has not taken sincere efforts to achieve the same. NIMA suggested that third party energy audit should be made mandatory. Every distribution transformer should be metered and MSEDCL staff should be made responsible for distribution losses.

Dr. Mahesh Tulpule proposed that electronic meters should be installed for all new consumers on priority. Babasaheb Naik Kapus Utpadak Sahakari Soot Girni Ltd. suggested the use of pre-paid meters and submitted that pre-paid meters would be useful for controlling theft of electricity, and controlling the manpower requirement for (a) meter reading, (b) maintaining books and records, (c) recovery of arrears etc.

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Shri A. K. Patil, Assistant Engineer, MSEDCL, and Dr. Yogesh Suryavanshi requested the Commission to direct MSEDCL to implement Songir pattern, which would reduce unauthorised extension of load by consumer by installation of load regulator near LT cable. Shri Ashok Patil, Kolhapur submitted that each distribution transformer should be metered and provided with appropriate capacitor. Shri Ravi Khilnani pointed out that faulty meters are mainly responsible for rise in distribution losses and such meters are not replaced by MSEDCL due to non availability of meter stock. He added that MSEDCL should regularly inspect all DTC meters for proper recording and functioning of the meter.

Maharashtra Paper & Board Manufacturers Association, Aurangabad submitted that MSEDCL has assumed that number of un-metered connections would remain the same over next three years, despite the fact that it has made huge provisions for metering of Agriculture and other consumers and the losses due to un-metered connections have a huge bearing on the tariff proposal.

MSEDCL's Response

MSEDCL submitted that it is taking massive efforts to improve metering.

Commission's Ruling

In this context, MSEDCL had filed a Petition seeking extension of time-frame for achieving 100% metering for agricultural consumers as mandated in the EA 2003. The Commission, in its Order dated October 13, 2006 in Case 13 of 2006, ruled as follows:

"The statutory obligations of metering under the EA, 2003 and the MERC (Standards of Performance of Distribution Licensees, Period for Giving Supply and Determination of Compensation) Regulations, 2005 are mandatory, and the filing of a Petition for extension of time for installation of correct meters cannot be allowed for escaping from the statutory and mandatory obligations."

- "...it would be expected of the Petitioners to take all appropriate and sufficient steps to resolve any problem or difficulty that is faced by the Petitioners in meeting the statutory obligations imposed under Section 55(1)."
- "... for energy accounting, the Petitioners may adopt 'group' metering methods.

 DTC metering may be adopted and energy accounting methods may be adopted

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for cases where meter installation is difficult. For unmetered pumpsets, their consumption can be determined by adopting energy accounting methods and each and every unmetered consumer could be billed in proportion to the horsepower of the pumpset."

"...Adequate efforts are required to be made by the Petitioners and the Petitioners should therefore start in earnest to implement the provisions of EA, 2003 regarding installation of meters on all electricity installations in Page 4 of 4 an expeditious manner."

Thus, MSEDCL has to ensure 100% metering at all levels, starting from feeder level to DTC level, to individual consumer level, as stipulated in the EA 2003. The Commission expresses its displeasure at MSEDCL's slow progress in this regard, as even the Feeder and DTC metering programme has not been completed yet by MSEDCL, (leave alone the metering of lakhs of un-metered agricultural consumers) particularly as the Commission has already approved the capital expenditure towards metering of all the consumers. MSEDCL should make serious efforts to ensure that the schedule indicated under the capital expenditure scheme is achieved.

In order to incentivise consumers to adopt metering, the metered tariffs have been specified lower than the effective flat rate tariffs. Further, when such metered consumers participate in DSM programmes, then all such consumers who shift to metered tariffs will be entitled to a rebate of 10% in the energy bills to be given by MSEDCL.

2.34. SECURITY DEPOSIT

NMC and several other consumers objected to demand for additional security deposit by MSEDCL. Maharashtra Paper & Board Manufacturers Association, Aurangabad proposed that consumer deposits should be considered as long-term deposits with MSEDCL, and MSEDCL should pay the interest on security deposit at the bank rates.

MSEDCL's Response

MSEDCL, in its presentation during the Public Hearing submitted that it has collected total security deposit of Rs. 2239 Crore till FY 2006-07. MSEDCL stated that interest is paid at rate of 6% as per prevailing bank rate of interest and as per provisions of the

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Commission's Tariff Regulations. MSEDCL submitted that any increase in the rate of interest would create additional burden on consumers.

Commission's Ruling

The consumers' security deposit lying with MSEDCL is considered as funds available with MSEDCL, while computing the working capital requirement, in accordance with the Commission's Tariff Regulations. Further, the interest payable on the consumers' security deposit is stipulated in the Commission's Tariff Regulations, and is equivalent to the prevailing Bank Rate. The consumers should appreciate that if the interest on consumers' security deposit is increased, under the cost-plus regime, the revenue requirement and hence, the tariff will also have to be increased correspondingly.

2.35. CAPITAL EXPENDITURE

Prayas submitted that the capital expenditure proposed to be undertaken by MSEDCL would have long-term bearing on the consumer tariff, and hence, the Commission should collect thorough data and information before giving in-principle clearance for any capital expenditure scheme. Prayas added that only such capital expenditure schemes approved by the Commission should be considered at the time of tariff determination. Considering the large capital expenditure being undertaken by MSEDCL, it is essential to closely monitor the capital expenditure related components of ARR. Prayas requested the Commission to clearly establish a link between the 'in-principle' clearances granted to the capital expenditure schemes and actual increase in fixed assets and suggested that the Commission's Tariff Order should provide details of different capital expenditure schemes approved by the Commission, their current status, deviation from the approved cost as well as their scope. The Tariff Order should also indicate the details of schemes that have been capitalized and included in the fixed assets of the licensee.

MGP submitted that there is a direct link between technical losses and capital expenditure. In spite of the Commission's directions for segregation of technical and commercial losses, MSEDCL has not complied with the same. MGP objected to MSEDCL's loss reduction trajectory of 3% for FY 2008-09 and proposed that the loss reduction target should be increased. Marathwada Association of Small Scale Industries and Agriculture stated that though consumers pay for the cost of infrastructure, the asset belongs to MSEDCL and opined that consumer must not be made to pay for MSEDCL's infrastructure cost.

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MSEDCL's Response

MSEDCL submitted that its infrastructure is quite old, deteriorated and overloaded. In order to observe the Standards of Performance and discharge obligations stipulated under the EA 2003 and the Commission's Regulations and Orders, MSEDCL has submitted Infrastructure Plan for 119 schemes, which is under active consideration of the Commission for in-principle approval. The Commission has already accorded its in-principle approval for 101 schemes.

MSEDCL submitted that the objective of undertaking capital expenditure is to upgrade the ageing and weak distribution network to desirable standards so as to provide better network reliability and sustainable performance. The capital expenditure plan also envisages strengthening 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, achieve automation and other improvement works to enhance customer service and fulfil social obligation such as electrification of un-served areas.

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

- a) APDRP Schemes: Departmental works, meters, SCADA, ongoing works, etc.
- b) Infrastructure Works Plan: DPDC and others to cover the release of domestic connection, agriculture connection, rural industrial connection and associated infrastructure works, gaonthan feeder separation
- c) Demand Side Management Schemes: Conservation of energy by carrying out modification/improvement in the distribution network
- d) Automatic meter reading
- e) RGGVY: Electrification of rural households including 100 % BPL consumers and associated infrastructure works
- f) Agriculture metering: to cover the un-metered agriculture connections to reduce the losses

MSEDCL submitted that the deployment of the capital investment is aimed at

- a) providing reliable and quality supply by replacing various network equipments
- b) meeting load growth demand,

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c) reduction in distribution losses in line with the directions issued by the Commission under its MYT Order.

Commission's Ruling

The Commission has considered the capital expenditure and capitalisation for FY 2006-07, FY 2007-08 and FY 2008-09, on the basis of the schemes approved by the Commission till date. In this context, though the Commission had asked MSEDCL to submit the actual status of capital expenditure and capitalisation in FY 2007-08, MSEDCL has not submitted the same till date. Given the ambitious target of capital expenditure that MSEDCL has set itself, MSEDCL's inability to track scheme-wise capital expenditure is not too comforting. Since the Commission has no additional data on which to modify the projections of capital expenditure and capitalisation considered in the MYT Order, the Commission has retained the same in this Order also. The same will be modified at the time of final truing up for FY 2007-08 only if MSEDCL submits the necessary scheme-wise details of capital expenditure and capitalisation and project status and costs vis-à-vis the Commission's approval. MSEDCL should reinforce its capability to monitor this data and submit the same to the Commission on a periodic basis, as this will facilitate analysis of the delays, if any, in the capital expenditure and capitalisation, vis-à-vis the projected and approved schedules.

The Commission's analysis of the capital expenditure and capitalisation approved by the Commission in the MYT Order for FY 2007-08 and FY 2008-09 vis-à-vis the capital expenditure projected by MSEDCL in the APR Petition, is elaborated in Section 5 of this Order.

2.36. DEMAND SIDE MANAGEMENT (DSM)/ENERGY CONSERVATION

TBIA submitted that MSEDCL is hardly putting any efforts towards energy conservation. Tata Motors stated that reactive power management is necessary for efficient utilization of generators, transmission and distribution lines and equipment, reduction of technical losses and to improve quality of power supply. Reactive Power Management is the responsibility of both consumers and MSEDCL. Awareness of the need to improve power factor amongst consumers is increasing every day. Tata Motors submitted that just as the consumer is supposed to maintain good power factor, MSEDCL is also responsible to ensure proper and effective reactive compensation at each voltage level of its transmission and distribution network. In the last three years, MSEDCL has not made

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any appreciable progress in reactive power compensation. They suggested that MSEDCL should allow good rebate in energy bills over and above PF incentive to consumers who have undertaken energy conservation measures because consumer has to make comparatively heavy investment to improve and maintain power factor above 98%.

Maharashtra Rajya Veej Grahak Sanghtana stated that MSEDCL has intentionally deleted the scheme of installation of capacitors, which would have provided reactive power compensation of 800 MVA and requested the Commission to direct MSEDCL to implement the scheme in Ichalkaranji Division on pilot basis. 25% expenditure should be allowed from Load Management Charge (LMC) revenue and remaining could be generated on BOT basis.

Indian Railways pointed out that MSEDCL has not given consideration to significant initiative undertaken by Railways for conservation of energy. Railways added that they are doing cogeneration of electrical energy by three phase electric locomotive and EMU's, and also improving the Power Factor and reducing their Maximum Demand. Maharashtra Jeevan Pradhikaran submitted that it has taken several efforts to implement energy saving measures as a result of which, it received the Limca Book Award for implementation of gravity schemes.

Kolhapur Engineering Association suggested that entire agricultural load of the State should be bifurcated in two equal loading groups in continuous geographical areas and load shedding should be carried out in rotation, viz., 5.00 hours to 12.00 hours and 12.00 hours to 19.00 hours. Similar policy might be implemented for Gaothan feeders. They added that MSEDCL should attempt implementation of DSM and energy saving schemes, i.e., distribution of CFL lamps, installation of, solar heaters, energy efficient equipments, energy audits, etc., in a time bound manner. Several objectors submitted that use of air conditioners should be banned in offices of public utilities, Government departments and undertakings, and other organisations under the direct administration of the State Government or local bodies and they should be directed to use optimum energy.

Amravati Retail Cloth Merchants Association, Babasaheb Naik Kapus Utpadak Sahakari Soot Girni Ltd. and several others proposed that electricity used for luxurious purposes all over the State should be banned with immediate effect. Kreepa Steel Industries suggested that it was possible to save around 1000 MW of energy in lighting by use of various energy saving measures.

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MSEDCL's Response

MSEDCL submitted that it implementing energy efficiency improvement measures in street lighting and water-pumping stations in 819 Grampanchayats in Aurangabad district and 632 Grampanchayats in Osmanabad district. The scope of work covers light sensitive switches for street lighting, which would work on actual lighting requirement. Motor/pumps at water pumping stations would be provided with Auto Time Starters for shifting of load from peak hours to off–peak hours. MSEDCL further submitted that it has taken several initiatives for demand supply management schemes and it has been continuously submitting 'Detailed Project Reports' for all the schemes in excess of Rs. 10 Crore to the Commission as per the requirement of the MERC (Terms and Conditions of Tariff) Regulations, 2005, giving detailed cost benefit analysis of each scheme.

Commission's Ruling

The Commission has directed MSEDCL to adopt Demand Side Management Measures (DSM) and reduce the demand for power in its license area. The cost of such DSM projects shall be allowed by the Commission as a part of the Annual Revenue Requirement of MSEDCL, which would be more than offset by the savings in power purchase cost due to reduction in demand.

2.37. ADDITIONAL SUPPLY CHARGE (ASC)/INCREMENTAL ASC (IASC)

VIA submitted that MSEDCL has over recovered ASC of around Rs. 918 Crore for the period from April 2007 to October 2007, due to wrong methodology of deciding bench mark consumption for levy of ASC. VIA suggested that ASC should also be considered as a tariff component and the Commission should not change the methodology of computation of ASC units once it is decided through Tariff Order. For issuing any clarification, the process of tariff determination should be followed. VIA added that there should not be any incentive or disincentive mechanism for reduction or increase in the consumption but the ASC should be levied at a fixed percentage of current month's consumption.

MGP and Maharashtra Rajya Veej Grahak Sanghatana suggested that the ASC should be levied considering actual load shedding hours. MGP pointed out that many consumers do

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not want to pay ASC and are prepared to accept highest load shedding applicable in respective category. MSEDCL should select few feeders for the implementation of the same on trial basis. Maharashtra Rajya Veej Grahak Sanghatana stated that the energy bill should specify all the details of load shedding hours and ASC computations, or detailed advertisement should be published every month in newspapers. He added that a mechanism to check and verify the correctness of the ASC levied should be established by the Commission. He suggested to remove the concept of benchmark consumption and requested the Commission to charge ASC on actual consumption. TBIA submitted that MSEDCL is charging ASC greater than that specified in the ASC matrix approved by the Commission. TBIA proposed that Circles having distribution losses lower than 26.86% should be exempted from the levy of ASC.

NIMA stated that the computation of ASC and FAC done by MSEDCL are not transparent and requested for simplification of ASC matrix. Vidyut Urja Equipments Ltd. and Advocate Balaji Yenge referred to vetting reports of ASC and IASC for the period from October 2006 to April 2007 and submitted that MSEDCL has made excess recovery of Rs. 785.24 Crore towards ASC and IASC and requested the Commission to direct MSEDCL to pay interest on this amount.

Vidarbha Iron & Steel Corp. Ltd. submitted that the viability of industries is being threatened by ASC matrix proposed by MSEDCL, wherein, 52.8% of power consumption has been considered as costly power. They added that the consumer is unable to estimate the cost of the product, since the effect of ASC/IASC and FAC calculations are known to him only after receipt of electricity bill. Vandana Dyeing Pvt Ltd. and many other consumers objected to concept of benchmark consumption for computation of ASC.

R. L. Steels Pvt. Ltd., Janata Dal (Secular) Vasai Taluka, Veej Grahak Sanghatana, Vasai, Nirbhay Jan Manch and many other objectors requested the Commission to remove the concept of ASC and IASC from tariff as levy of ASC and IASC is not permissible under EA 2003 and contravenes provisions of Section 62(4) of EA 2003.

Railways objected to the levy of ASC for Railways, since they have uniform consumption pattern in the entire MSEDCL license area, which in turn improves the load profile of MSEDCL. NMC requested the Commission not to levy ASC for Municipal

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Corporations, Nagarpalikas and local bodies, being essential service provider to the society.

ISPAT submitted that the ASC concept is based on unreliable figures and requested the Commission to remove ASC in its Tariff Order and direct MSEDCL to refund excess ASC recovered to the industrial consumers on one to one basis. On the contrary, Garware Industries Ltd. requested the Commission to continue ASC mechanism as provided under Tariff Order dated May 18, 2007 with all principles, philosophy and protocols including bench mark consumption of the year 2005. They suggested that there is no need for realigning the ASC matrix and submitted that MSEDCL should take help of experts for eliminating billing complaints on account of ASC mechanism prevailing now. They strongly recommended continuing the incentivisation of reduction in consumption with respect to benchmark consumption of 2005.

Ecoboard Industries Ltd. and several other industrial consumers strongly objected to proposed tariff hike by way of increasing the percentage of ASC. Monarch Catalyst Pvt. Ltd. suggested modification in the method of computation of benchmark consumption for new consumers. Omech Tooltech Pvt. Ltd. suggested that ASC computations must be based on the capacity utilization in an efficient manner rather than average consumption for a specific period, since the average consumption of a particular period would depend on the market situation.

Parbhani Oil & Dall Mill Owners Association opposed for the levy of ASC due to frequent interruptions in power supply. Shri Prakash Jaiswal submitted that methodology of charging of ASC charges in not clear to consumers and suggested that MSEDCL should widely advertise and publish the methodology of ASC computation. Grahak Panchayat, Nagpur stated that ASC should be charged for assured supply and not for additional supply.

Solapur Oil Mills Owners Association submitted that ASC is contradictory to the concept of fixed charges. Fixed charges are levied to recover expenses on account of infrastructure created to ensure readiness of supply, while ASC charges are levied for not getting supply.

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Finolex Industries Ltd. pointed out that monthly meter reading period varies from 28 days to 31 days affecting monthly consumption and ASC calculations and suggested that benchmark consumption should be taken on pro-rata basis for the month as against actual billed units recorded for the month. They submitted that the directions issued by the Commission under its Clarificatory Order dated August 24, 2007 regarding exclusion of the shutdown period for calculation of benchmark consumption is not clear to many consumers as percentage of the consumption allowed for shutdown period compared to normal consumption has not been clarified properly.

Marathwada Association of Small Scale Industries and Agriculture proposed that ASC computation should be based on estimated consumption as per contract demand/connected load and ASC should be levied only if the consumption crosses estimated consumption.

MSEDCL's Response

MSEDCL submitted that the concept of ASC was jointly deliberated upon by MSEDCL and the Commission considering the overall shortage scenario and also to ensure that the common consumer is not loaded with the additional cost of power in case he is not benefiting from the reduced load shedding. Further, ASC concept was necessary to be developed since it is practically impossible for all categories of consumers to be subjected to equitable load shedding depending on the shortage.

MSEDCL submitted that if equitable distribution of load shedding would be carried out for all consumer categories, the effective load shedding hours would increase to ten hours a day, however, industries would not survive with a daily load shedding of ten hours and therefore, need a separate treatment, which should be revenue neutral for the rest of the consumers of MSEDCL. Thus, due to the reduced load shedding specifically for some consumer categories, it is necessary that the cost of 19% costly power should be borne by specified groups of consumers, through ASC mechanism.

MSEDCL further submitted that though ASC matrix shows an increased percentage in terms of the quantum of costly power, the effect of the same is neutralized to some extent due to power availability from RGPPL at a much lower rate of Rs. 3.39. MSEDCL projected that the weighted average rate per unit payable by the specified group of consumers falling under the scope of ASC would not increase in the same proportion as

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the increase proposed in their base tariff. The ASC rate is proposed to reduce to Rs. 4.97 per unit from existing rate of Rs 5.36 per unit.

Commission's Ruling

The ASC was introduced by the Commission in the Tariff Order for FY 2006-07, in the context of the increasing need to procure short-term additional costly power in order to mitigate load shedding, and hence, the non-costly power (primarily comprising power sourced from MSPGCL and Central Sector) was equitably allocated to all regions and categories, while the costly power was allocated to certain categories, who were benefiting from reduction in load shedding, and the expenditure on the procurement of costly power was recovered through ASC. However, it has been observed that the actual procurement of costly power by MSEDCL has been much lower than that estimated by the Commission in the Orders for FY 2006-07 and FY 2007-08, whereas ASC is recovered from the consumers every month in accordance with the ASC matrix, leading to a situation where significant amount of over-recovery of ASC is taking place.

Moreover, it has been observed that costly power is not being procured to the extent envisaged, which means that the requirement of the consumers is being met through procurement of non-costly power itself, and the rationale for treating certain power as costly and ear-marking the same for certain categories is no longer necessary. MSEDCL has also not refunded the ASC over-recovery till date, even for the period October 2006 to March 2007, as confirmed in MSEDCL's reply to a specific query from the Commission in this regard.

As regards treatment of RGPPL, there is no loss to MSEDCL due to RGPPL being considered as non-costly power and the ASC matrix being removed, since MSEDCL has been given full recovery of all its power purchase costs, including that from RGPPL power.

Accordingly, in this Order, the Commission has done away with the concept of Additional Supply Charges (ASC), and all the power purchase has been pooled and considered while computing the ARR and tariffs.

2.38. OPEN ACCESS

VIA referred to the Commission's Order in Case No.s 55 & 56 of 2003 and submitted that the consumer can reduce contract demand to desired level if the power is wheeled

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through open access. VIA stated that the Commission has not specified the methodology of calculating billing demand of third party purchaser/captive power user through open access, and suggested that the differential demand recorded by real time Special Energy Meter (SEM) installed at supplier end and user end should be considered as billing demand and unscheduled interchange would be governed by UI charges. VIA proposed that ASC units should be reduced for the power wheeled through open access and any energy wheeled through open access in excess of ASC units should be adjusted against base tariff units.

VIA submitted that MSEDCL has proposed very high wheeling charges of Rs.269/kW/month for 33 kV level and Rs. 316/kW/month for 22/11 kV open access users, which is about 9 times the existing wheeling charges for 33 kV level, though the network cost projected is less than the previous years' computation, i.e., Rs. 2279 Crore as against Rs. 2348 Crore in FY 2007-08. VIA requested the Commission not to allow the higher wheeling charges projected by MSEDCL.

TBIA submitted that ARR should be based on voltage-wise assets. Further, consumers/group of consumers should be allowed to source the power from various other sources to bridge the demand-supply gap. TBIA suggested that no cross-subsidy surcharge should be levied for open access transactions. Indian Railways submitted that EA 2003 and NTP have provided for Open Access. Further, the Commission has also paved the way by notifying the requisite Regulations for Open Access. They submitted that Railways may explore procurement of power through Open Access due to which MSEDCL may lose its most prominent customers.

Maharashtra Elektrosmelt Ltd. suggested that the wheeling charges for different voltage levels should be rationalized based on parameters stipulated in the MYT Order, and suggested that the wheeling charges for 22 kV should be reduced.

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. MSEDCL has applied the ratio of voltage-wise GFA to arrive at GFA for 33 kV and 22/11 kV assets. MSEDCL added that the total ARR of wires business has been apportioned to various voltage levels in the ratio of their contract demand, for computation of the wheeling charges.

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Commission's Ruling

The Commission's analysis and ruling on the wheeling charges, wheeling losses, cross-subsidy surcharge and open access surcharge has been elaborated in Section 6 of this Order. As regards the suggestion that only the differential demand recorded by the consumer after considering the demand of third party purchaser/captive power user, to be recorded through a Special Energy Meter, the Commission does not find merit in the suggestion, as this would require synchronisation of the meters and is likely to lead to disputes.

2.39. SINGLE PHASING SCHEME

VIA submitted that as on March 31, 2007, MSEDCL's gross assets include Rs. 160 Crore pertaining to single phasing scheme and submitted that MSEDCL has claimed Rs. 6.21 crore as depreciation on these assets. VIA requested the Commission not to allow the single phasing scheme due to safety hazards and high percentage of technical losses and added that MSEDCL has not submitted energy audit report on single phasing. VIA requested the Commission to penalize MSEDCL under Section 142 of EA 2003 as MSEDCL has violated the Orders of the Commission and arranged funds at cost of consumer without taking any approval of the Commission. VIA proposed that the Commission should direct MSEDCL to refund loan from its RoE without loading common consumers.

Shri N. Ponrathnam submitted that concept of single phasing is short term relief and not a remedy. He presented that single phasing scheme always projects situation of load shedding and it is better to invest in generation capacity than single phasing schemes.

MSEDCL's Response

MSEDCL submitted that MSEDCL is obligated to supply power to all households within its area of supply as mandated under NEP. Implementation of the single phasing scheme is a step forward towards achieving this objective. MSEDCL stated that single phasing is technical requirement to reduce load shedding hours and enable continuous supply to rural households. Further, infrastructure required for single phasing scheme can also be used to provide three phase supply.

MSEDCL submitted that implementation of single phasing scheme does not discriminate between consumer categories as it enables all the consumers under this scheme to receive

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power supply at the existing level or at an improved level. MSEDCL added that power supply to rural domestic consumers presently covered under single phasing scheme has increased to 22 hours compared to previous 12 hours. MSEDCL submitted that the agricultural consumers are not affected as status quo has been maintained as regards their power supply.

Commission's Ruling

The Commission has not considered the capital expenditure and capitalisation towards the single phasing scheme, while considering the GFA and computing the depreciation, interest and RoE, since the capital expenditure towards single phasing scheme has been disallowed by the Commission earlier through a separate Order.

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3 TRUING UP OF ANNUAL REVENUE REQUIREMENT FOR FY 2001-02

MSEDCL submitted that in view of the Judgment passed by the Hon'ble Bombay High Court, the erstwhile MSEB had communicated to the Commission in March 2004 that the Honourable High Court had asked the Commission to consider the creation of a one-time Regulatory Asset for FY 2001-02. The Commission had therefore, been requested to approve creation of a Regulatory Asset, which for the FY 2001-02, was computed as Rs. 539.36 Crore based on audited accounts of MSEB for FY 2001-02 to cover the revenue gap for FY 2001-02 in line with the directives of the Judgment passed by the Hon'ble Bombay High Court, vide its Judgment dated February 11, 2004. MSEDCL included the revenue gap on account of the truing up for FY 2001-02, while estimating the total revenue gap for FY 2008-09. The variation between the actual expenditure and revenue under each head with that approved by the Commission in the Tariff Order for FY 2001-02, and the revenue gap estimated by MSEDCL for FY 2001-02 is given in the Table below:

Rs. crore

	FY 2001-02				
Particulars	MSEB Petition	Approved	Actual	True-Up	
Generation of Power	3792.00	3763.10	4064.43	301.33	
Purchase of Power	2818.00	2950.00	4058.04	1108.04	
Transmission Charges					
Operation & Maintenance / Repair & Maintenance	672.10	670.20	591.72	(78.48)	
Employee Costs	1840.00	1703.80	1571.67	(132.13)	
Admin & Gen Expenses	277.60	119.60	127.53	7.93	
Depreciation	1544.00	1526.90	1439.63	(87.27)	
Interest Charges	1308.40	1110.40	1375.44	265.04	
Provision for Doubtful Debts	200.00	169.70	169.70	0.00	
Lease Rentals	85.00	85.00		(85.00)	
Extraordinary Items			0.60	0.60	
Income Tax					
Contribution to Contingency					
Reserves					

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Rs. crore

	FY 2001-02				
Particulars	MSEB Petition	Approved	Actual	True-Up	
Other Debits	250.70	254.70	33.93	(220.77)	
Surplus / (Deficit)	493.20	493.20		(493.20)	
Total Expenses Allowed	13281.00	12846.60	13432.32	585.72	
Revenue from Sale of Power	13281.00	11644.40	12048.10	403.70	
Income Considered through excess T&D losses		635.90		(635.90)	
FOCA (Jan 2001 to Mar 2001)		(127.60)		127.60	
Revenue through FOCA FY 2001-02		9.50		(9.50)	
Revenue Subsidies & Grants			0.49	0.49	
Other Income		684.30	653.74	(30.56)	
Revenue Gap of MSETCL					
Surplus					
Net Prior Period Credit			190.53	190.53	
Total Revenue	13281.00	12846.50	12892.86	46.36	
Deficit for Current Year		(0.10)	(539.46)	(539.36)	
Cumulative Loss				(539.36)	

MSEDCL submitted the reasons for the variation in key heads, as follows:

- a) The actual cost of generation has been higher to the extent of Rs. 301 Crore, on account of
 - § The actual generation during FY 2001-02 was 45930 MU as compared to the Commission's approval of 44708 MU.
 - § The actual cost of generation was Rs. 0.88 per kWh, as compared to the Commission's approval for Rs. 0.84 per kWh.
 - The Lease Rent of Hydro Power Stations amounting to Rs. 85 Crore, which has been separately approved by the Commission under a different head, is also booked in the Schedule of Generation of Power in the books of accounts of MSEB.
- b) The actual power purchase cost is higher by Rs. 1108 Crore, due to:
 - Actual power purchase during FY 2001-02 was 19616.378 MU at a total cost of Rs. 4058 crore, as compared to the Commission's approval of 16040 MU at a total cost of Rs. 2950 Crore.

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- § The actual cost of purchase of power was Rs. 2.07 per unit, whereas the Commission approved Rs. 1.84 per unit cost of purchase of power.
- c) The actual employee expenses were lower by Rs 132 Crore, as compared to the Rs 1704 Crore approved by the Commission.
- d) The actual interest expenditure has been higher to the extent of Rs. 366 Crore, on account of
 - § The actual interest and finance charges include expenses such as interest on consumers' security deposit, Commitment Charges, Bank Charges and Guarantee Fee for which the Commission has approved Rs. 212 Crore under Other Debit. The actual amount incurred under these heads is only 182 Cr.

MSEDCL submitted that with compounded interest at the rate of 12% for six years, the uncovered revenue gap of Rs. 539 crore for FY 2001-02 works out to Rs 1065 Crore as on March 31, 2008, which has been added to the revenue gap of FY 2008-09.

Before discussing the Commission's analysis of the truing up sought by MSEDCL for FY 2001-02, it is necessary to understand the background against which the High Court's Judgment was given, and the essence of the Judgment. The erstwhile MSEB filed an Appeal before the Honourable Bombay High Court against the Commission's Tariff Order dated January 10, 2002 for MSEB for FY 2001-02. The Honourable High Court upheld certain aspects of MSEB's Appeal, while it rejected certain other aspects of MSEB's Appeal.

On the issue of delay in submission of ARR and Tariff Petition, the Honourable High Court held as under:

"Though the initial tariff proposal was submitted on 15th March, 2001, the Board was required to submit a revised tariff proposal on 31st August, 2001, on account of very special circumstances arising out of the disputes between the Board and Dabhol Power Company (Enron). Such disputes do not occur every year. The situation arising out of the disputes was exceptional. The reasons for the delay in submitting the revised tariff proposal were therefore, exceptional. The Commission, therefore, could have and should have considered the creation of a regulatory asset for the year 2001-2002, without fear of that being treated as a precedent in future."

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On the issue of allowing prudent expenses, the Honourable High Court held as under:

"While considering the finances of the Board for the purpose of fixation of the tariff what can be considered are only the expenses properly chargeable. The expression 'properly chargeable' connotes not the expenses which are actually incurred by the Board but the expenses which are "properly incurred" i.e. the expenses which were required and ought to have been incurred by the Board for the purpose of meeting its obligations and supplying of energy. There can be no doubt that the affairs of the Board should be managed efficiently. Extravagance, unnecessary and wasteful expenditure is not permitted and if incurred must be on the Board's own account.

The consumer cannot be made to pay on account of wastages inefficiencies and extravagances of the Board through increase in the tariff. The Auditor's opinion as to whether the expenditure was properly incurred under Schedule 6 to the Electricity Supply Act is not binding on the Commission which is charged with the duty of fixing the tariff by taking into consideration only the expenses properly incurred.

Commission would therefore, be required to only take into consideration the expenses properly incurred while determining the tariff. It would exclude the expenses which were incurred by the Board on account of its inefficiencies as also wastefulness and extravagance. After disallowing the expenses which in the opinion of the Board were not properly incurred, however, the Commission cannot allow a revenue gap in the finances of the Board."

On the issue of the concept of T&D loss charges introduced by the Commission, the Honourable High Court held as under:

"The main point of controversy raised in all the appeals is regarding Transmission & Distribution losses (for short T & D losses'). The revenue that would have been earned by the Board if T & D losses were contained was not taken into consideration by the Board while preparing tariff proposal. If the T & D losses are reduced, the revenue generation would be much higher. ... This was because projected T & D losses were of the order of 39.49%. In other words, out of every 100 units of power generated and purchased by the Board, it expected to bill only for 60.51 of the units and was unable to bill for 39.49 units on account of

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T & D losses. The calculations for the tariff proposals were based by the Board on the basis of revenue earned by billing for 60.15% of the power.

...

We are aghast at the claim made by the Board that actual T & D losses could be in the region of 50% to 55%. At this level of T & D losses, we wonder whether the appellant Board is generating, purchasing and distributing power for the consumers or for the thieves of electricity. In our opinion, the Commission has rightly rejected the claim of the MSEB for fixing the tariff on the basis of T & D losses 39.4%. It is however necessary to consider whether the Tribunal was justified in allowing the T & D losses only to the extent of 26.87 and on that account, disallowing the revenue requirement to the extent of 636 crores.

28. We notice that the Commission has adopted an unorthodox and innovative method in dealing with T & D losses. T & D losses can be broadly classified in two categories, transmission losses and distribution losses. ... As stated earlier, this could be on account of variety of reasons, most important of which is theft of electricity or supply of electricity without meters. If electricity is supplied to certain class or classes of consumers without meters on account of policy of the State and thereby they are required to pay less than the power consumed, the State consumed, the State is now bound to make good the loss by subsidy under Section 65 of the Electricity Supply Act, 2003. The Commission has recorded a finding of fact that both the appellant Board and consumers are responsible for inability to prevent theft of electricity. The Board has not taken effective steps for detection and prevention of thefts. Even when the cases are detected and prosecutions are launched on account of judicial delays, the accused are not convicted immediately and often acquitted for want of sufficient evidence, encouraging the people to commit theft. One of the major factors against detection and prevention of thefts is ethos and culture of the Society and loathness of the consumers in reporting thefts of electricity by their neighbours. Even those who are aware, rarely complain or bring the theft to the notice of the authorities. The Board and the consumers are pari delecto in preventing T & D losses on account of thefts. The Commission has noted that it would be appropriate to apportion 50% of the excess over the targeted distribution loss to the account of the appellant Board and 50% to the consumers accounts.

...

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31. Whether a 50% burden of the difference between targeted T & D losses and actual T & D losses should be borne by MSEB or whether the percentage should have been different could be a debatable issue. We are conscious that the expert body like respondent Commission has taken a view and we should be slow in substituting our opinion for theirs.

...

What the Commission has done is calculated the difference between the allegedly properly estimated T & D loss of 39.4% and the targeted loss of 26.87% to be 12.6% and has proposed to apportionate 50% of this difference to the Board and 50% to the consumers by the methodology discussed above. Thus, out of T & D loss 39.6%, 6.3% is charged to the account of the consumers, which if reduced would make the T & D losses to the account of appellant Board to be a little over 33%. Thus, in fact, the Commission has allowed more T & D losses of a little over 33% which are more than 31.87% fixed for the previous year. Taking into consideration that the T & D losses are to be reduced to 16% as fixed by CEA in a reasonable period of time, we are unable to accept the submission of the learned counsel for the Board that Commission should have allowed more latitude." (emphasis added)

Though the erstwhile MSEB had approached the Commission earlier, seeking creation of the Regulatory Asset for FY 2001-02, the Commission had directed MSEB to submit the detailed rationale for the deviations between the actual expenditure and approved expenditure. In previous Tariff Petitions, though MSEDCL has been referring to the truing up for FY 2001-02 in certain Annexures, MSEDCL has never quantified the amount for truing up, which has to be recovered by adding to the revenue gap of the year for which the tariff is being determined. It is only now that MSEDCL has specifically sought truing up for FY 2001-02, and has included the impact of the same in the total revenue gap. The Commission has hence undertaken the truing up for FY 2001-02 in this Order.

The total amount of truing up sought by MSEDCL for FY 2001-02 is Rs. 1065 crore, which includes carrying cost interest at the rate of 12% per annum for 6 years from FY 2001-02 to FY 2007-08. The Commission analysed the reasons for the revenue gap estimated by MSEDCL for FY 2001-02. The Commission asked MSEDCL to submit its replies to certain specific queries, which has been submitted by MSEDCL. Based on these replies and additional data submitted by MSEDCL, the Commission has accepted

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the expenses and revenue considered by MSEDCL for FY 2001-02 for most of the heads, except the following:

- 1. The Commission has disallowed the expense of Rs. 264.86 crore towards power purchase from the erstwhile Dabhol Power Company (DPC), since this expense was not included in the original ARR Petition itself, under the premise that MSEB had raised counter-claims towards rebate on DPC, and hence, this amount was not payable. MSEDCL has now included this expense under the truing up exercise, and submitted that MSEB's rebate claims of around Rs. 361 crore upto January 2001 and Rs. 306 crore in May 2001, were not accepted in the final settlement with DPC, and hence, this amount towards power purchase from DPC is payable. However, MSEDCL has not submitted any documentary evidence of the entire settlement with DPC, to enable the Commission to validate the claim that the rebate was not considered in the settlement in some form or the other. On MSEDCL's submission of the necessary documents to substantiate its claims, including details of the efforts taken to pursue the rebate claim, the Commission may consider the extent of this expenditure towards power purchase from DPC, at that stage.
- 2. The interest expense of Rs. 107.89 crore towards DPC related bonds have been disallowed, since the Commission has ruled earlier that the investment in DPC bonds forms a part of the non-regulated business, and the consumers of MSEB cannot be asked to bear the interest burden on such bonds.
- 3. Thus, the total revenue expenses allowed by the Commission for FY 2001-02 under the truing up exercise amounts to Rs. 13059.94 crore, as compared to Rs. 13432 crore sought by MSEDCL.
- 4. In the Tariff Order for FY 2001-02 issued on January 10, 2002, which forms the basis for MSEDCL's request for truing up, the Commission had ruled that the cost of the excess losses should be borne equally by the consumers and the MSEB. Accordingly, the consumers' share was recovered through the levy of a 'T&D Loss Charge' levied to certain consumer categories, while MSEB's share was addressed by considering the cost of 50% of excess losses as additional revenue to MSEB, and correspondingly reducing the ARR of MSEB for FY 2001-02. The Honourable Mumbai High Court, in its Judgment on the Appeal filed by MSEB against this Order of the Commission, appreciated the Commission's efforts in this regard, and the novel approach to tackle the increasing level of T&D losses. The same Judgment also directed that the Commission should allow creation of a Regulatory Asset as a one-time exercise, since the delay in filing the Petition could be attributed towards extraneous reasons. Accordingly, MSEDCL has sought truing up of the revenue gap for FY 2001-02.

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Since the High Court has upheld the Commission's approach in this regard, the Commission has added the assessed revenue of Rs. 635.9 crore on this account to MSEDCL's actual revenue in FY 2001-02. Accordingly, MSEB's revenue for FY 2001-02 has been considered as Rs. 13528.76 crore, as compared to the revenue of Rs. 12892.86 crore indicated by MSEDCL.

For FY 2001-02, the Commission has thus assessed a revenue surplus of Rs. 468.8 crore, as compared to the gap of Rs. 1064 Crore considered by MSEDCL. The Commission has however, not considered any carrying cost on this surplus, since MSEDCL's claim on account of the expense on power purchase from DPC, is yet to be finalised. This surplus of Rs. 468.8 crore has been utilised to reduce the revenue gap for FY 2008-09, as discussed in the Section __ on total revenue gap and tariff philosophy.

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4 TRUING UP OF ANNUAL REVENUE REQUIREMENT FOR FY 2006-07

MSEDCL, in its Petition for Annual Performance Review for FY 2007-08 and determination of revised revenue requirement and tariff for FY 2008-09 has included a section on final truing up of expenditure and revenue for FY 2006-07 based on actual expenditure and revenue for FY 2006-07 as per audited accounts. MSEDCL provided the comparison of actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission along with the reasons for deviations.

In this Section, the Commission has analysed all the elements of actual revenue and expenses for FY 2006-07, and has carried out the truing up of expenses and revenue after prudence check. Further, the Commission had stipulated in its Order dated October 20, 2006 that the gains and losses on account of controllable and uncontrollable factors will be shared between the Utility and the consumers at the time of truing up of ARR in accordance with Regulation 19 of the MERC (Terms and Conditions of Tariff) Regulations, 2005.

4.1 Sales

MSEDCL submitted the month-wise actual category-wise sales in the Formats annexed to the APR Petition. The summary of actual sales in the two halves of the financial year is given in the Table below:

Table: MSEDCL's Actual Sales in FY 2006-07 (MU)

	Sl.	Particulars	Tariff Order	Actuals		
				H1	H2	Total
=	1	Sales	47968	24299	24847	49147

The actual sales have been higher than the sales considered in the Tariff Order, by 1179 MU. The Commission has considered the actual sales under the truing up process.

4.2 Distribution Losses and Energy Input Requirement

MSEDCL submitted that the distribution loss achieved by MSEDCL for FY 2006-07 was 29.5%, while computed for MSEDCL system on a stand-alone basis. MSEDCL added

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that, however, if the pooled normative transmission loss level determined by the State Load Despatch Centre for the entire State is considered as 4.85%, then the distribution loss level achieved by MSEDCL in FY 2006-07 works out to 30.5%, which has been considered as the base for the MYT loss reduction trajectory of 4% every year.

In the MYT Order, the Commission assessed the actual distribution losses in FY 2006-07 as 31.6%, which formed the opening loss levels for the MYT Control Period from FY 2007-08 to FY 2009-10. In the MYT Order, the Commission clarified that as the opening loss levels, i.e., distribution loss in FY 2006-07, have been estimated on the basis of projected levels of power purchase and sales in FY 2006-07, the same would have to be trued up based on actual energy input and actual metered sales, without modifying the quantum of assessed un-metered sales. The distribution loss reduction trajectory specified by the Commission would be applicable on the actual opening levels of distribution loss.

In the Tariff Order dated October 20, 2006, the Commission had determined the Energy Input requirement, by grossing up the sales with the approved distribution losses and the intra-State transmission losses of 4.85%. However, since the intra-State transmission losses and the interim balancing and settlement code in the State was implemented with effect from October 1, 2006, the energy input requirement to be considered under the truing up exercise has to also be considered separately for the two halves of the year. In MSEDCL's case, the Commission has considered the applicable transmission losses at the same level as the intra-State transmission (InSTS) losses, which is predominantly comprised by MSETCL losses, to whose network MSEDCL is primarily connected. Further, based on the SLDC statements, it is observed that the actual InSTS losses were 5.25% over the period from October 2006 to March 2007, hence, the transmission losses to be considered for MSEDCL for the entire year have been considered as 5.25%. by applying this level of transmission losses, the effective distribution losses in MSEDCL's system in FY 2006-07, works out to 30.2% as shown in the Table below, which has been accepted by the Commission and considered as the opening loss level for the MYT Control Period.

Particulars	Units	FY 2006-07		
2 un viculais		MSEDCL	Approved	
Purchase from MSPGCL	MU	46,383	46,383	
Purchases from other sources within the State	MU	3,601	3,601	
Total Purchase from within the State	MU	49,984	49,984	

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Particulars	Units	FY 2006-07		
1 at ilculary	Cints	MSEDCL	Approved	
Effective gross purchase from outside the State	MU	25,537	25,537	
Central Generating Station	MU	18,950	18,950	
UI	MU	1,786	1,786	
Kawas/ Gandhar/ Traders	MU	4,802	4,802	
Inter-State transmission losses	%	4.75%	4.75%	
Net purchase from outside the State	MU	24,325	24,325	
Total Power Purchase payable	MU	75,521	75,521	
Energy at Transmission Periphery	MU	74,310	74,310	
Intra- State Losses	%	4.85%	5.25%	
Energy at Distribution Periphery	MU	70706	70409	
Distribution losses	%	30.5%	30.2%	
Energy sold	MU	49147	49147	

4.3 Power Purchase quantum and Cost for FY 2006-07

The Commission in its Order on approval of MSEDCL's ARR for FY 2004-05, FY 2005-06 and FY 2006-07 and determination of Tariff for FY 2006-07, approved total power purchase expenses of Rs 13632 Crore for FY 2006-07 on the basis of assumptions specified in the said Order, and separately considered the purchase from costly and noncostly sources. The Commission also considered the intra-State transmission charges payable by MSEDCL at Rs 1264 Crore for FY 2006-07 based on the approved transmission tariff for FY 2006-07 and SLDC charges of Rs 16 Crore. Thus, the total power purchase expenses approved by the Commission for MSEDCL for FY 2006-07 including transmission charges and SLDC charges was Rs 14912 Crore.

MSEDCL, in its APR Petition, requested for truing up of the total power purchase expenses to the extent of increase in power purchase cost by Rs 1364 Crore. The Commission has considered and analysed the power purchase expenses for the period from April 1, 2006 to March 31, 2007, as per the audited accounts of MSEDCL for FY 2006-07 and compared the power purchase expenses claimed by MSEDCL vis-à-vis the revenue considered by MSPGCL and MSETCL in their audited accounts.

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MSEDCL, in its Petition, submitted that that the variation in purchase from cheaper sources is mainly attributable to the shortfall in actual generation of MSPGCL. MSEDCL submitted that as compared to the availability approved by the Commission for MSPGCL, there was shortfall of around 3192 MU and for meeting this shortfall, MSEDCL sourced power from Kawas Power plant, UI Energy from the grid and other sources during FY 2006-07.

MSEDCL submitted that that the major variation in power purchase from costly power sources is due to the shortfall in actual generation of RGPPL to the extent of 2186 MU as compared to availability approved by the Commission. For meeting this shortfall, MSEDCL had sourced more power from power traders to the extent of 1,221 MU.

The Commission scrutinised the audited accounts submitted by MSEDCL and MPSGCL for the period from April 1, 2006 to March 31, 2007 and observed a difference of Rs 50.40 Crore between the audited accounts of MSEDCL (against power purchase from MSPGCL) and audited accounts of MSPGCL (revenue from sale of Power to MSEDCL). The Commission queried MSEDCL and MSPGCL about the difference in the above expenses after the admission of MSEDCL's and MSPGCL's APR Petition. MSPGCL and MSEDCL in their replies submitted the following reasons for variation in expenses claimed by MSEDCL and revenue shown by MSPGCL:

Table: Reasons for Variation

Description	Amount (Rs Crore)	Reasons for Variations
A. Amount billed by MSPGCL to MSEDCL	7338.37	
Less: Amount disputed (Excess Bill, hence not considered by MSEDCL)	26.36	This is a disputed amount not included in accounts of MSEDCL
Less: Provision of differential billing rate in the books of accounts of MSPGCL	142.10	This amount is not considered in accounts of MSEDCL. However this provision is made in 2007-08.

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Description	Amount (Rs Crore)	Reasons for Variations
Add: Differential of FAC considered by MSEDCL in accounts than that actually billed by MSPGCL (316.40-197.94)	118.46	MSEDCL has considered an FAC of Rs 316.40 Crore. On the other hand MSPGCL has considered an amount of Rs 197.94 Crore. MSPGCL had made less provision for FAC bill for the period Oct 06- Mar 07 which is revised subsequently to the amt of Rs 308.5 Crore in 2007-08 by MSPGCL Therefore in MSEDCL's accounts Rs 118.46 is additional amount for FAC.
Less: Adjustments for advance billing (in Apr-07 and Apr-06)	0.40	Pertains to correction in advance billing.
B. Final cost of power purchase considered by MSEDCL	7287.97	Final amount as per books of accounts of MSEDCL
C. (A-B) Differential	50.40	

MSEDCL, in its reply, added that the items not considered in the accounts of MSEDCL will be reviewed during reconciliation and will be accounted for subsequently after resolving the disputed items and the necessary truing up exercise will be carried out after audit of the accounts for the said period.

The Commission has therefore, considered the amount of the Rs 7287.97 as shown by MSEDCL in its audited accounts for the purpose of truing up. However, the Commission in its Order dated May 31, 2008 in the matter of MSPGCL's APR for FY 2007-08 and tariff for FY 2008-09 has ruled that it will undertake the truing up of revenue of MSPGCL for FY 2006-07 as part of final truing up for FY 2006-07 after following the due Regulatory process. Accordingly, any impact of truing up of revenue for MSPGCL will have a bearing on the power purchase expenses for purchase from MSPGCL, and the Commission will consider the impact based on the outcome of such truing up.

The Commission asked MSEDCL to submit the details of monthly transmission charges paid by MSEDCL during FY 2006-07. MSEDCL provided the monthly transmission

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charges paid and submitted a total amount of Rs 1352 Crore towards the intra-State transmission charges for FY 2006-07. The Commission has considered the transmission charges of Rs 1352 Crore as submitted by MSEDCL for truing up purposes.

As regards purchase from renewable sources, the Commission, in its Order in the matter of long term development of renewable energy sources and associated regulatory (RPS) framework 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)

MSEDCL, in its APR Petition, submitted the details of power purchase from renewable energy sources during 2006-07. MSEDCL has purchased 1868 MU from renewable energy sources at a total cost of Rs 563 Crore. For truing up purposes for FY 2006-07, the Commission has considered purchase from renewable sources as submitted by MSEDCL.

The Commission in the Tariff Order for MSEDCL for FY 2006-07, disallowed the power purchase of 215 MU and the related power purchase expense of Rs 96 Crore that was incurred by MSEDCL on account of non-imposition of second staggering day of load shedding by MSEDCL, despite violation of load regulation by continuous and non continuous industries till the month of September 2006, and reduced the power purchase cost to this extent. The Commission asked MSEDCL to submit the reasons for including the power purchase expenses disallowed by the Commission due to non-implementation

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of the second staggering day, under the truing-up exercise. MSEDCL submitted that this matter is pending before Hon'ble Appellate Tribunal for Electricity (ATE). MSEDCL therefore, requested the Commission to allow the actual power purchase expenses and carry out the final truing-up of power purchase cost in this regard, in accordance with the Judgment of ATE in this regard, at the time of the APR for FY 2008-09, if required.

The Commission has considered the request of MSEDCL in this regard and has not disallowed any expenses on account of non-imposition of second staggering day of load shedding by MSEDCL, despite violation of load regulation by continuous and non-continuous industries, in the truing up for FY 2006-07 and will consider its impact based on the Judgment of ATE in this matter during the APR for FY 2008-09. However, this should not be construed as acceptance of the MSEDCL's arguments in this regard.

The summary of the power purchase cost allowed for FY 2006-07 after truing up, is given in the Table below:

(Rs. Crore)

Particulars	Tariff	Truing Up sought	Actuals	Allowed After
	Order	by MSEDCL		Truing up
Power Purchase Cost	14912*	16,276.71	16,276.71	16,276.71

^{*}includes purchase from costly and non costly sources

4.4 O&M Expenses

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

4.4.1 Employee Expenses

MSEDCL submitted that the total actual employee expenses for FY 2006-07 was Rs 1926 Crore against the Rs 1445 Crore approved by the Commission in the Tariff Order.

MSEDCL submitted that the main reason for increase in the employee expenses by around Rs. 481 crore is the additional provision for liability in respect of Earned Leave Encashment payable to the employees in accordance with the requirements of AS 15. MSEDCL submitted that the Earned Leave Encashment was earlier accounted for on cash basis as it was paid, up to FY 2005-06. MSEDCL's statutory auditors commented on

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non-compliance with AS 15 while auditing the accounts for FY 2005-06. Accordingly, MSEDCL has made this provisioning from FY 2006-07 on accrual basis as per the Actuarial Valuation amounting to Rs.440.23 Crore as on March 31, 2007, and hence the expense under this head has increased correspondingly.

The Commission has obtained the actual employee expenses for FY 2006-07 under various heads and analysed the increase in expenses for FY 2006-07 over actual expenses in FY 2005-06. Considering the details of actual employee expenses submitted by MSEDCL, the Commission has accepted the actual employee expenses for FY 2006-07 under the truing up exercise, except for the one-time impact of Rs. 440 crore on account of change in accounting policy on provisioning for leave encashment on the basis of actuarial valuation, in accordance with Accounting Standard (AS) 15 – R, which has been spread over a period of five years starting from FY 2006-07, since the provisioning is for the past years as well, and the impact of any such change in accounting policy of such magnitude cannot be expected to be passed through in the same year. 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	Tariff	Actuals	Allowed after truing up
	Order		
Gross Employee Expenses	1571	2040.70	1688.75
Less: Expenses capitalized	126	115.04	95.41
Net Employee Expenses	1445	1925.66	1593.33

4.4.2 A&G Expenses

MSEDCL submitted that the actual A&G expenses in FY 2006-07 were Rs 148 Crore as against Rs 108 Crore approved by the Commission in the Tariff Order for FY 2006-07. MSEDCL submitted that the main reasons for increase in the A&G expenses by around Rs. 40 crore are:

- § The payment of MERC Licence Fees amounting to Rs. 6.38 Crore is now included under this head, which was earlier booked under Other Expenses.
- § Creation of new circle like Gondia and new divisions and subdivisions has led to increase in the A&G expenses.

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- § During FY 2006-07, the rates of dearness allowance and lodging expenses for official tours were revised, which has led to increase in A&G expenses.
- Solution Owing to creation of new offices and need for additional security due to unrest amongst consumers, the security expenses have increased.
- § The vehicle hiring expenses have also increased on account of the above reasons
- § Increase in other expenses such as computer stationery, Advertisements, Fees & Subscriptions, consultancy charges, Legal & Audit Fees, etc.

Considering the details of actual A&G expenses, reasons submitted by MSEDCL for increase in A&G expenses, and the ATE Judgment in this regard, the Commission has allowed the actual A&G expenses for FY 2006-07 under the truing up exercise. However, MSEDCL should attempt to minimise the legal expenses, especially on cases initiated by MSEDCL opposing consumers, unless there is real merit in the case, and amount involved is large from MSEDCL's perspective. The Commission observes that the percentage of actual capitalisation of A&G expenses reported by MSEDCL is significantly higher, and the same has been accepted by the Commission. The summary of A&G expenses approved in the Order, actual A&G expenses and A&G expenses approved after truing up for FY 2006-07 has been shown in the following Table:

(Rs Crore)

Table: A&G Expenses

Particular	Tariff Order	Actuals	Allowed after truing up
Gross A&G Expenses	117	206.94	206.94
Less: Capitalisation	9	59.09	59.09
Net A&G Expenses	108	147.85	147.85

4.4.3 R&M Expenses

MSEDCL submitted that the actual R&M expenses for FY 2006-07was Rs 416 Crore, as compared to the R&M expenses of Rs. 340 Crore approved by the Commission in its Tariff Order dated October 20, 2006. MSEDCL submitted that the increase of Rs. 76 crore in FY 2006-07 is attributable to the increase in the Repairs and Maintenance of lines and underground cables, mainly in the area of Pune, Bhandup, Thane, Vashi and Nagpur, due to the following reasons:

§ The Govt. / Local Authority has taken a drive to remove the unauthorised hutments, due to which, the distribution lines have to be shifted.

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§ Over a period of time, the roads are being widened for many reasons by various agencies viz. MMRDA, Municipal Corporation, PWD, etc. Due to the widening of the roads, rather than shifting the existing underground cables, which are old and of PILC type, new cables have been laid as it is the cheaper option.

As the Commission is undertaking the truing up of expenses for FY 2006-07 based on actual expenses subject to prudence check, and in accordance with the ATE Judgment, the Commission has considered actual R&M expenses of Rs 416 Crore for FY 2006-07. The summary of R&M expenses approved in the Order, actual R&M expenses and R&M expenses approved after truing up for FY 2006-07 has been shown in the following Table:

Table: R&M Expenses (Rs Crore)

Particular	Tariff Order	Actuals	Allowed after truing up
R&M Expenses	340.5	416.26	416.26

4.5 Depreciation

The Commission, in its earlier Order dated October 20, 2006, had permitted depreciation to the extent of Rs 352 Crore for FY 2006-07, which amounted to 3.57% of the Opening level of Gross Fixed Assets (GFA) of MSEDCL for FY 2006-07, which was stated at Rs 9859 Crore. The depreciation rates were considered as prescribed under MERC (Terms and Conditions of Tariff) Regulations, 2005. MSEDCL, in its APR Petition, submitted the actual depreciation expense incurred for FY 2006-07 as Rs 368.65 Crore, at an overall depreciation rate of 3.88% corresponding to opening GFA of Rs 9508 Crore.

The Commission has examined the depreciation expense and actual capitalisation claimed by MSEDCL in detail as against the various capex schemes approved by the Commission. The Commission observed that the Opening level of GFA for FY 2006-07 of Rs 9508 Crore considered by MSEDCL includes the capital cost of single phasing schemes, which have not been approved by the Commission. Accordingly, for the purpose of true-up exercise for FY 2006-07, the Commission has considered opening GFA for MSEDCL at Rs 9428 Crore excluding capitalisation of single phasing schemes as against that claimed by MSEDCL, as per its audited accounts.

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Further, the Commission observed that actual capitalisation by MSEDCL during FY 2006-07 amounted to Rs 1023.05 Crore. The Commission has verified the actual capitalisation claimed by MSEDCL as against the capex schemes already approved by the Commission. The Commission has not considered capitalisation of the single phasing schemes as the same has not been approved by the Commission. Further, MSEDCL in its additional submissions confirmed that depreciation has not been claimed beyond 90% of the asset value in accordance with the Tariff Regulations. The depreciation expenditure approved by the Commission for FY 2006-07 has been summarised in the following Table:

Table: Depreciation (Rs Crore)

Particulars	Tariff Order	Actuals	Allowed after truing up
Depreciation	352.00	368.65	365.55
Opening GFA	9859.00	9508.00	9428.00
Depreciation Rate	3.57%	3.88%	3.88%

4.6 Advance against depreciation

MSEDCL has sought approval for advance against depreciation in line with the conditions stipulated under the Commission's Tariff Regulations. Regulation 62.3 and 74.3 of MERC (Terms and Conditions of Tariff) Regulations, 2005, stipulates that where the actual amount of loan repayment in any financial year exceeds the amount of depreciation allowable under Regulation 63.4.2 and 76.4.2, the distribution licensee shall be allowed an advance against depreciation for the difference between the actual amount of such repayment and the allowable depreciation for such financial year.

Accordingly, Advance against Depreciation (AAD) projected by MSEDCL and approved by Commission after true-up of FY 2006-07 is summarised in the following Table:

Rs Crore

Particulars	Tariff Order	Actuals	Allowed after truing up
Loan Repayment	94	592.23	262.87
Depreciation	352	368.65	365.55
Advance Against depreciation (AAD)	Nil	223.58	Nil

As seen in the Table above, there is a significant difference in the loan repayment considered by MSEDCL and the loan repayment considered by the Commission, which is

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on account of the fact that MSEDCL has included the short-term loan taken from REC in the above computations, which has been disallowed by the Commission, as detailed below.

4.7 Interest Expenses

The Commission, in its earlier Order dated October 20, 2006 had approved interest expenses of Rs 116 Crore, after considering the interest cost of debt corresponding to capitalised assets only.

MSEDCL has claimed that actual interest expenses of MSEDCL on long term loans in FY 2006-07, net of capitalisation, is significantly higher than that approved by the Commission in its Tariff Order. The main reason for increase in interest expenses as stated by MSEDCL is opening loan balance of Rs 3652.74 Crore as considered by MSEDCL as against opening loan balance of Rs 1602 Crore considered by the Commission in the Tariff Order for FY 2006-07.

The Commission sought clarification from MSEDCL on the significant difference in opening loan balance between that considered by MSEDCL and as considered by the Commission in the Tariff Order. Upon verification with audited account statements, the Commission observed that opening loan balance as considered by MSEDCL includes short term loan from REC to the extent of Rs 1300 Crore. Since such short-term loans cannot be considered while computing the long-term interest expenses, the Commission has not considered the same under the true-up exercise. The short-term loan from REC has to be compared to the normative working capital requirement, if any.

Also, MSEDCL has not submitted any explanation for the remaining difference between the opening balance of loan considered in MSEDCL's Petition vis-à-vis that considered by the Commission in the Tariff Order for FY 2006-07. In the absence of any explanation for the same, the Commission has considered the opening loan balance and the interest rate in line with the Tariff Order for the purpose of true up. In case MSEDCL submits adequate justification for the difference between the numbers, then the impact of the same could be considered at the time of APR exercise for FY 2008-09. Moreover, Interest during Construction (IDC) on loans has been considered as part of capitalised asset value and hence, interest expense has been computed only for loans corresponding

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to assets put to use, as a result of which, further capitalisation has not been considered while computing the interest expenses. The long-term interest expenses allowed by the Commission for FY 2006-07 under the truing up exercise are given in the Table below:

Particulars	Tariff Order	Actuals	Allowed after truing up
Opening balance of loan	1602.00	3652.74	1601.63
Additions	0.00	714.25	714.62
Repayment	(94.00)	(592.23)	(262.87)
Closing balance of loan	1508.00	3774.76	2053.38
Gross Interest expenses	129.00	375.20	154.35
Less IDC	(13.00)	(60.74)	
Net Interest expenses	116.00	314.46	154.35

4.8 Interest on working capital and Consumers' Security Deposit

As regards Interest on Working Capital, MSEDCL submitted that the actual working capital interest incurred was Rs. 3 crore, as compared to nil interest approved by the Commission in its Order dated October 20, 2006. MSEDCL submitted that the Other Interest and Finance Charges including interest on consumers' security deposit amounted to Rs. 183 crore, as compared to Rs. 140 crore approved by the Commission, with the primary difference occurring in Other Finance Charges, to the extent of Rs. 38 crore.

As regards interest on working capital, as discussed in earlier paragraphs, MSEDCL has incurred interest expenditure on the short-term loan taken from REC to the extent of Rs. 1300 crore, which has to also be considered under the interest on working capital, as actually incurred expenses. However, the Commission's 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.

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

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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. 182.4 crore.

4.9 Incentives and Discounts

MSEDCL submitted that as per audited accounts, the incentives and discounts paid/allowed to consumers was Rs 71.5 Crore as compared to Rs 166 Crore approved by the Commission in the Tariff Order. The Commission has considered the actual expenditure on this account under the truing up exercise.

4.10 Other Expenses

MSEDCL submitted that the actual Other Expenses incurred by MSEDCL was Rs 6 Crore as compared to Rs 41 Crore approved by the Commission in the Tariff Order. MSEDCL also submitted that the prior period expenses amounted to Rs. 38 Crore. The Commission has considered the actual expenditure on this account, to the extent of Rs. 44 crore, under the truing up exercise.

4.11 Provisioning for Bad Debts

In the Tariff Order for FY 2006-07, the Commission had allowed provisioning for bad and doubtful debts to the extent of 1.5% of revenue, which worked out to Rs. 207 crore. In the APR Petition, MSEDCL submitted that it has actually provided for bad debts to the extent of Rs. 299 crore.

For the purposes of truing up for FY 2006-07, the Commission has considered provisioning for bad debts as 1.5% of the revenue, which works out to Rs. 283 crore.

4.12 Contribution to Contingency Reserves

MSEDCL submitted that the contribution to contingency reserves for FY 2006-07 has been considered at 0.5% of opening GFA in accordance with the Commission's Tariff Regulations, as Rs. 50 Crore, as approved by the Commission in the Tariff Order.

The Commission's 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

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sought documentary evidence from MSEDCL to confirm that the contingency reserve has been invested in the approved securities, which was submitted by MSEDCL.

The Commission has also considered the contribution to contingency reserves at 0.5% of opening GFA for FY 2006-07, which works out to Rs. 47 crore, based on the actual capitalisation and opening GFA considered by the Commission for FY 2006-07.

4.13 Return on Equity (RoE)

MSEDCL has submitted that it has computed return on equity as per principles outlined under MERC (Terms and Conditions of Tariff) Regulations, 2005. MSEDCL has claimed higher return on equity of Rs 517.98 Crore for FY 2006-07 as compared to the RoE of Rs 390.88 Crore approved by the Commission in the Tariff Order dated October 20, 2006, mainly on account of the higher value of opening regulated equity and higher value of equity portion corresponding to the capitalised expenditure considered by MSEDCL for FY 2006-07.

As regards opening balance of Equity for FY 2006-07, MSEDCL submitted that the GOM notified the provisional Transfer Scheme No Reform 1005/CR 9061/NRG-5 dated June 4, 2005. Under the provisional Transfer Scheme, the assets and liabilities were allocated to the successor entities (MSEB Holding Company, Generation Company, Transmission Company and MSEDCL) based on the accounts of erstwhile MSEB as on March 31, 2004. The provisional Transfer Scheme was made effective from June 6, 2005. The allocation was thus, provisional. The equity for MSEDCL was considered as Rs 2250 Cr, which was provisional. Later on, when the actual accounts as on June 5, 2005 were prepared after considering various adjustments during transfer/allocation of assets and liabilities, the same were allocated to the successor entities (MSEB Holding Company, Generation Company, Transmission Company and MSEDCL). Accordingly, based on this final allocation as on June 5, 2005, the Board of Directors of MSEB Holding Company passed a Resolution on 26th September 2006 to adopt the final allocation/transfer of assets and liabilities. This Transfer Scheme was forwarded to the GOM by MSEB Holding Company for its necessary approval and notification which is yet to be done by the GoM. The final equity for MSEDCL after allocation was considered as Rs 3083.93 Cr. Based on the above opening Balance Sheet as on June 6, 2005 as approved by MSEB Holding Company, the accounts of MSEDCL were prepared and duly audited.

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MSEDCL added that the Commission has considered and approved the opening Balance Sheet and RoE as approved by MSEB Holding Company in case of MSETCL in its MYT Order dated April 2, 2007. Hence, MSEDCL requested the Commission to approve the base equity of Rs 3083.93 Cr for the purpose of computation of Return on Equity.

The Commission has verified MSEDCL's claim for higher opening regulated equity and equity portion of assets capitalised during FY 2006-07 as per its audited financial statements. Accordingly, the Commission has computed the RoE for FY 2006-07 on the opening balance of equity and assets capitalised in accordance with the Tariff Regulations 63.1 and Regulations 76.1 as applicable for the distribution business. The summary of RoE as projected by MSEDCL and approved by the Commission for FY 2006-07 is summarised in the following Table:

Table: Return on Equity (Rs Crore)

Particulars	FY 2006-07				
	Tariff Order	Revised Estimate by MSEDCL	Allowed after truing up		
Regulatory Equity at the beginning of the year	2443.00	3083.93	3083.93		
Equity portion of assets capitalised during year	0.00	306.83	308.16		
Regulatory Equity at the end of the year	2443.00	3390.77	3392.10		
Return on Regulatory Equity at the beginning of the year	390.88	493.43	493.43		
Return on Equity portion of capitalised asset value during year	0.00	24.55	24.65		
Total Return on Regulatory Equity	390.88	517.98	518.08		

4.14 Income Tax

MSEDCL has not paid any income tax for FY 2006-07, and hence, no income tax expense has been considered under the truing up exercise.

4.15 Non Tariff Income

MSEDCL submitted that the actual non-tariff income of MSEDCL during FY 2006-07 was higher, at Rs 887 Crore as compared to Rs 734 Crore approved by the Commission in the Tariff Order. The Commission has considered the non-tariff income equal to the actual non-tariff income reported by MSEDCL, as shown in the Table below:

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Table: Non-Tariff Income (Rs Crore)

Particulars	Tariff Order	Actuals	Allowed after truing up
Non-Tariff Income	734	887	887

4.16 Aggregate Revenue requirement in FY 2006-07 after truing up

(Rs. Crore)

			FY 2006-07	
Sl.	Particulars	Order	Audited	Approved after truing up
1	Power Purchase Expenses	13632	14925	14925
2	Operation & Maintenance Expenses			
2.1	Employee Expenses	1445	1926	1593
2.2	Administration & General Expenses	108	148	148
2.3	Repair & Maintenance Expenses	340	416	416
3	Depreciation, including advance against depreciation	352	608	366
4	Interest on Long-term Loan Capital	116	314	154
5	Interest on Working Capital, consumer security deposits and Finance Charges	140	185	182
6	Provision for Bad Debts	207	299	283
7	Other Expenses	41	44	44
8	Income Tax	0	0	0
9	Transmission Charges paid to Transmission Licensee (incl SLDC Charges)	1281	1352	1352
11	Contribution to contingency reserves	49	50	47
13	Incentives/Discounts	166	72	72
15	Total Revenue Expenditure	17877	20338	19582
16	Return on Equity Capital	391	518	518
17	Aggregate Revenue Requirement	18268	20856	20100
19	Less: Non Tariff Income	734	887	887
20	Surplus of previous years - FY 2004-05	137	137	137
21	Surplus of previous years - FY 2005-06	227		
22	Aggregate Revenue Requirement from Retail Tariff	17170	19832	19076

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MSEDCL submitted that in the MYT Order, the Commission has determined a revenue surplus of Rs 563 Crore for FY 2005-06 based on Audited Accounts of FY 2005-06, and accordingly reduced the Revenue Requirement of FY 2007-08 by this surplus amount of Rs. 563 Crore, while determining tariff for FY 2007-08. However, during the pendency of Tariff Order for FY 2006-07, the Commission reviewed the unaudited accounts of MSEDCL for FY 2005-06 and determined a surplus of Rs. 227 Crore for FY 2005-06. For determination of the Revenue Requirement for FY 2006-07 in Case No. 54 of 2005, the Commission had reduced the Revenue Requirement of FY 2006-07 by this amount of Rs. 227 Crore. As a consequence, the Commission has adjusted the surplus of FY 2005-06 twice, viz.,

- § first from the Revenue Requirement of FY 2006-07, and
- § again from the Revenue Requirement of FY 2007-08.

Hence, MSEDCL requested the Commission to allow Rs 227 Crore, which was adjusted for determination of tariff for FY 2006-07, as an expense, to be recovered under the truing up exercise.

The Commission agrees with MSEDCL's submission in this regard, and has hence, not considered this surplus amount of Rs. 227 crore, while undertaking the final truing up for FY 2006-07, as shown in the Table above.

The aggregate revenue requirement (ARR) for FY 2006-07 after truing up works out to Rs. 19076 crore, as compared to Rs. 17170 crore approved by the Commission in the Tariff Order for FY 2006-07. The primary reasons for the increase in the ARR is the increase in the power purchase expenses due to the higher sales, and reduced availability of lower cost generation which has been compensated to some extent by higher cost power purchase, as well as increase in the RoE due to the restatement of the opening equity, and the adding back of the surplus amount of Rs. 227 crore deducted twice by the Commission.

4.17 Revenue Gap/(Surplus)

MSEDCL submitted that the Commission has approved revenue from sale of power of Rs 17170 Crore including revenue from sale of costly power. As against this, the actual revenue earned by MSEDCL through sale of electricity was Rs 18,863 Crore. MSEDCL computed the revenue gap for FY 2006-07 as Rs. 968 crore, as shown in the Table below:

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Table: MSEDCL Projection of Revenue Gap for FY 2006-07

Rs. Crore

Sl.	Particulars	Approved (A)	FY 2006-07 Actual (B)	True –up Amount (B-A)
1	Net Annual Revenue Requirement	17,170	19,832	2,662
2	Revenue from Sale of Power	17,170	18,863	1,693
4	Net Revenue Gap/(Surplus)	0	968	968

MSEDCL requested the Commission to true-up the revenue gap of Rs 968 Crore for FY 2006-07.

The Commission's analysis of the truing up for FY 2006-07 shows that MSEDCL has a surplus of Rs. 214 crore in FY 2006-07, which has been adjusted against the approved revenue requirement for FY 2008-09. In addition to the difference between the approved and actual expenses and revenue as discussed in earlier paragraphs, there is one additional aspect which has been considered as discussed below:

MSEDCL has been charging Additional Supply Charges (ASC) to its consumers since October 2006. The Commission has vetted the ASC charged over the period October 2006 to March 2007, and has directed MSEDCL to refund the excess ASC recovered from the consumers on one-to-one basis, as directed in the Tariff Order. However, MSEDCL is yet to refund any excess ASC. The excess recovery has happened because MSEDCL has not purchased the quantum of costly power envisaged at the time of the Tariff Order, whereas the ASC has been recovered through the tariffs in accordance with the approved ASC matrix. Under this scenario, if the entire over-recovery is refunded to the consumers on one-to-one basis, it will amount to these consumers not being charged for some proportion of their consumption, which will be incorrect. Hence, the refund has to be undertaken by MSEDCL in such a manner that the consumer at least pays the base energy charge applicable for the respective category for the entire consumption. This will result in MSEDCL having some surplus amount left, which has to be used to offset the expenditure on the non-costly power purchase. The exact additional amount available to MSEDCL for setting off against the base ARR will be known only after MSEDCL

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undertakes the exercise of refund of excess ASC to the relevant consumers on one-to-one basis, which has to be done for FY 2006-07 immediately. For the purpose of this Order, while truing up the expenses and revenue for FY 2006-07, the Commission has estimated that the additional amount available to MSEDCL for setting off against the base ARR of FY 2006-07 will be around Rs. 427 crore, and has hence considered this surplus to compute the revenue gap for FY 2006-07. The same will be adjusted once the actual amounts are known, at the time of Annual Performance Review for FY 2008-09.

The consolidated revenue surplus estimated by the Commission for FY 2006-07 is given in the Table below:

Table: Revenue Surplus for FY 2006-07 approved by the Commission

Rs. Crore

Sl.	Particulars	Order	FY 2006-07 Actual	Approved after truing up
1	Net Annual Revenue Requirement	17,170	19,832	19,076
2	Revenue from Sale of Power	17,170	18,863	18,863
3	Part of ASC over-recovery set off against revenue gap			427
4	Total Revenue	17,170	18,863	19,290
5	Net Revenue Gap/(Surplus)	0	968	(214)

4.18 Sharing of gains and losses in FY 2006-07

MSEDCL submitted the actual expenditure under various heads of expenditure and the reasons for variation between the approved expenditure and the actual expenditure. However, MSEDCL has not considered any expenditure head as controllable and hence, did not compute the gains and losses for the controllable 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:

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- (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."

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Since there is neither efficiency gain nor loss due to controllable factors, and the variation in expenses has been allowed as uncontrollable, the question of computing the sharing of gains/losses in accordance with the provisions of Tariff Regulations in respect of MSEDCL does not arise.

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5 PERFORMANCE REVIEW OF FY 2007-08 AND DETERMINATION OF REVENUE REQUIREMENT FOR FY 2008-09

5.1 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."

5.1.1 Distribution Losses

The Commission considered the opening level of distribution loss for FY 2007-08 as 31.6%, as elaborated in the earlier Section, which was a provisional assessment. 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.

As elaborated earlier, 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. Thus, considering a loss reduction of 4% each in FY 2007-08 and FY 2008-09 as stipulated in the MYT Order, the distribution loss level to be considered for FY 2007-08 and FY 2008-09 works out to 26.2% and 22.2%, respectively. This is as compared to MSEDCL's projections of distribution loss levels of 26.5% and 22.5% for FY 2007-08 and FY 2008-09, respectively, since MSEDCL had considered the opening loss level as 30.5%.

The Commission has hence, considered the distribution loss levels of 26.2% and 22.2% to assess the energy requirement for FY 2007-08 and FY 2008-09, respectively. Further, as discussed in the paragraphs on sales projections, additional sales have been projected due to surplus energy availability projected by MSEDCL, and hence, no further additional sales have been considered on account of the reduction in distribution losses.

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5.2 Control Period

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

5.3 Provisional Truing-up for FY 2007-08

MSEDCL, in its APR Petition for FY 2007-08 and Petition for approval of revenue requirement and tariff for FY 2008-09, submitted the performance for FY 2007-08 based on actual performance for the first half of the year, i.e., April to September 2007, and estimated performance for the second half of the year, i.e., October 2007 to March 2008. MSEDCL submitted the comparison of each element of expenditure and revenue with that approved by the Commission in its Order dated April 24, 2007 on MSEDCL's Multi Year Tariff petition for the Control Period from FY 2007-08 to FY 2009-10.

MSEDCL, in its Petition, requested that the estimated revenue gap for FY 2007-08 be considered while determining the approved expenditure for FY 2008-09.

The Commission will undertake the final truing up of the revenue requirement and Revenue for FY 2007-08 once the audited accounts of MSEDCL for FY 2007-08 are available, i.e., during Annual Performance Review for the second year of the Control Period, viz., FY 2008-09. However, the Commission in this Order on APR for FY 2007-08 and determination of Tariff for FY 2008-09 has considered provisional truing up of certain elements of the revenue requirement 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 2007-08 and FY 2008-09 as compared to the Commission's MYT Order for MSEDCL is discussed in the following paragraphs.

The Commission clarifies that the final truing up and the computation of sharing of gains and losses due to controllable factors will be undertaken only after the audited expenses and revenue are available. Further, for computing sharing of efficiency gains/losses for FY 2007-08, the revised expenses approved for FY 2007-08 in this Order under the provisional truing up exercise will be considered as base expenses.

5.4 Sales

MSEDCL submitted that the past five years' CAGR has been considered as the basis for the sales projection, which is the same methodology adopted by the Central Electricity

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Authority (CEA) in the 17th Electric Power Survey (EPS). MSEDCL added that the above sales projections cover only the restricted sales, as MSEDCL is sourcing all the power available to mitigate the load shedding to the extent possible. Based on MSEDCL's projections of energy availability, 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 in proportion to the actual consumption mix. MSEDCL added that the economy of Maharashtra is booming, which directly impacts the consumption pattern.

MSEDCL submitted that for the purposes of the APR Petition, based on the directives of the Commission that "recorded consumption of metered consumers would form the basis of estimation of agriculture consumption or as an alternative based on the complete DTC metering", MSEDCL has computed un-metered agriculture consumption for FY 2006-07 as follows

- § Units consumed by metered LT Agricultural consumers in the Zone at the end of the quarter are computed, by excluding all readings other than normal meter status readings.
- § The Zone Index (kWh/HP) for metered LT Agricultural consumers in the Zone is computed for the quarter.
- § The average quarterly load of un-metered Agriculture consumers in the Zone is computed.
- § The quarterly consumption of un-metered agriculture consumers is computed using the derived index (kWh/HP)

Based on this methodology, MSEDCL assessed the consumption of un-metered agriculture consumers for FY 2006-07 as 6493 MU. Further, MSEDCL has considered that consumption of LT un-metered Agriculture would remain same for FY 2006-07, FY 2007-08 and FY 2008-09, since MSEDCL has stopped extending un-metered connections and moreover, higher growth rate has been considered for LT metered Agriculture, as MSEDCL envisages addition of substantial number of Metered Pumps.

MSEDCL projected the sales of HT category for FY 2007-08 and FY 2008-09 as 27,190 MU and 30,318 MU, respectively. The sales of LT category for FY 2007-08 and FY 2008-09 have been projected as 27,168 MU and 30,407 MU, respectively. Since, MSEDCL has assumed that additional energy would be available for consumption by the

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consumers in LT categories, the additional energy was allocated to LT sales is proportion to the actual consumption mix. The revised sales of LT category for FY 2008-09 have been projected as 33457 MU. The total sales thus, projected by MSEDCL for FY 2007-08 and FY 2008-09, is 54358 MU and 63776 MU, respectively, as compared to actual sales of 49147 MU in FY 2006-07.

For FY 2007-08, the Commission obtained the details of category-wise sales for the 11-month period from April 2007 to February 2008 and pro-rated the same for the entire FY 2007-08, by considering the share of sales in March of the previous year, for each consumer category separately. This includes the sales to Bhiwandi franchisee area. As shown in the Table below, the actual sales in FY 2007-08 have been lower than that considered by the Commission in the MYT Order, by around 750 MU.

For FY 2008-09, the Commission has considered the 3-year and 5-year CAGR of sales for each category as appropriate, by considering the period from FY 2000-01 to FY 2006-07. For most categories like HT industrial and LT domestic, the Commission has considered the 5-year CAGR for projecting the sales, and for certain categories like MPECS, MSEDCL's sales projections have been accepted. The sales to LT un-metered agriculture category has been considered as 6493 MU in FY 2007-08 and FY 2008-08, based on data submitted by MSEDCL, and since the sales is lower than that considered by the Commission in the MYT Order. Further, since the Commission's projections of energy availability, based on the current status of different projects and commitment from MSEDCL to procure the same, the Commission has apportioned the additional energy availability to the LT consumer categories in proportion to the consumption mix, as suggested by MSEDCL. However, this also means that the load shedding to different consumer categories is expected to be lower than that undertaken in the previous year, and MSEDCL should ensure the same.

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

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Table: Approved sales for FY 2007-08 and FY 2008-09

		(FY 2007-08)			FY 2008-0	0		
			(Actual /	Estimates)			F 1 2000-0	
Category	FY 2006-07	MYT Order	MSEDCL APR Petition	Actual till Feb 08 - pro- rated for entire year	Approved	MSEDCL	Approved	After consdiering additional energy availability
HT Category								u (unito nino)
HT I- Industries	19985	22892	22902	20292	20292	25738	22448	22448
HT I- Cont (Express Feeders)	5914		6623	12009	12009	7417	13284	13284
HT I- NonCont (Non Express Feeders)	14607		16279	8284	8284	18320	9164	9164
HT II Seasonal	82.86	90	92	107	107	101	118	118
HTP III Railways	1192	1225	1310	1196	1196	1441	1276	1276
HT IV-PWW	1051	1209	1104	897	897	1159	930	930
HT IV- PWW (Express Feeders)	336		352	561	561	370	582	582
HT IV-PWW (Non Express Feeders)	715		751	336	336	789	348	348
HT V Agricultural	433	715	455	499	499	478	575	575
HT VI	398	460	427	458	458	458	496	496
Group Housing Society	354	433	379	380	380	405	411	411
Commercial Complex	43.2	27	48	79	79	53	85	85
HT VII -MPECS	610	649	640	657	657	672	672	672
Tata Sales	248		261	520	520	272	272	272
HT Total	24537	27240	27190	24627	24627	30318	26786	26786
LT Category								
LT I Domestic	8113	9200	8765	9110	9110	10623	9510	11629
LT I -BPL	176		193	17	16.99	239	18	22
LT I Domestic	7937		8572	9093	9093	10384	9493	11607
LT II Non Domestic	2124	2123	2124	2127	2127	2124	2127	2128
LT III PWW	492	377	541	538	538	668	710	868
LT IV Metered	2557	2968	3692	4451	4451	5337	6231	7619
LT IV Un-metered	6493	7186	6493	6493	6493	7318	6493	7939
LT V Industrial	4185	4654	4686	3680	3680	5888	4066	4971
LT VI Streetlight	590	547	614	606	606	716	628	768
LT VII- Temporary Connection	55.99	39	62	113	113	76	163	200
LT VIII Advertisement & Hoardings	0.86		0.94	4	4	1.05	4	5
LT Total	24610	27474	27168	27253	27253	33457	30252	36989
Bhiwandi Sales					2078.2			2190.4
Total MSEDCI Salas	49147	54714	54358	51879	53958	63775	57038	65966
Total MSEDCL Sales	49147	54/14	54358	518/9	53958	03/75	5/038	05900

Thus, the total sales estimated by the Commission for FY 2007-08 and FY 2008-09 is 53958 MU and 65966 MU, as compared to MSEDCL's estimate of 54358 MU and 63775 MU, respectively, in its APR Petition.

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5.5 Distribution Losses and Energy Input

As discussed earlier, the Commission has considered the distribution losses for FY 2007-08 and FY 2008-09 as 26.20% and 22.20%, respectively, as compared to MSEDCL's projections of 26.505 and 22.50% for FY 2007-08 and FY 2008-09, respectively. Thus, the total power purchase required to be done by MSEDCL in FY 2008-09, has been approved as 90206 MU, as elaborated in subsequent paragraphs, based on the energy balance and after considering inter-State and intra-State losses as applicable on the power purchase quantum.

5.6 Energy Availability and Power Purchase cost for FY 2007-08 and FY 2008-09

5.6.1 Total Power Purchase Quantum & Cost for FY 2007-08

MSEDCL, in its Petition projected power purchase expenses from MSPGCL based on actual generation, monthly Fixed Charges and Variable Charges for the period from April 2007 to September 2007. MSEDCL submitted that for the purposes of projections, it has extrapolated energy availability and power purchase for the remaining six months, i.e., from October 2007 to March 2008 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. 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 and MSEDCL also gets a substantial portion of the unallocated share.

MSEDCL submitted that for FY 2007-08, it has considered the actual power purchase for the first six months from April to September 2007 and for next six months, i.e. October 2007 to March 2008, MSEDCL has estimated the power purchase on pro-rata basis. MSEDCL submitted that it has considered the annual capacity charges for the existing NTPC Stations as per the tariff determined by CERC and variable charges have been considered as per July 2007 rates.

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MSEDCL submitted that for purpose of APR Petition, it has considered RGPPL as a costly source as well as a non-costly source for FY 2007-08 as approved by the Commission in its MYT Order dated May 18, 2007.

As regards purchase from other sources, MSEDCL submitted that it has projected the same based on the actual generation for the period April 2007 to August 2007 and by estimating the power purchase for the next seven months from September 2007 to March 2008. The rate for purchase of power from Wind Energy Projects and Co-generation Projects has been considered based on the rates approved by the Commission. MSEDCL submitted that it has considered only actual UI energy in first five months of FY 2007-08 and has not projected any UI energy for next seven months of FY 2007-08.

MSEDCL submitted that it has considered power from costly and non-costly sources separately. Accordingly, it has considered sources costing Rs 4 per unit and above at distribution periphery as costly sources for the purpose of APR Petition. MSEDCL submitted that the difference between the power purchase expense approved by the Commission and revised estimate is mainly attributable to purchase from RGPPL. Actual energy availability from RGPPL is only 949 MU as compared to 4075 MU approved by the Commission. MSEDCL submitted that to meet this shortfall it has procured power from Traders, Kawas LNG, Gandhar LNG, etc.

For FY 2007-08, the Commission has considered the source-wise actual power purchase quantum and cost for the first eleven months of the year, i.e., April 2007 to February 2008, and estimated the quantum of power purchase and cost for the month of March 2008 on pro-rata basis. The Commission has considered both, costly and non-costly sources of power purchase, while determining the revised ARR for FY 2007-08 under the provisional truing up.

The summary of the power purchase as petitioned by MSEDCL and as considered by the Commission after provisional truing up for FY 2007-08 is shown in the Table below:

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Table: Summary of Power Purchase for FY 2007-08

	Pet	ition	Approved after Provisional Truing up		
Station	Quantum	Total Cost	Quantum	Total Cost	
	MU	Rs crore	MU	Rs crore	
MSPGCL	46137	7831	47488	7537	
Korba STP	5173	528	5387	501	
Vindhyachal STP I	3347	437	3307	486	
Vindhyachal STP II	2625	357	2701	447	
Vindhyachal STP III	2053	336	2094	363	
VSTP III	159	14	174	16	
KAWAS GAS	208	46	219	45	
GANDHAR	1056	206	1099	239	
Sipat		73	0	0	
Farakka STPP	486	39	478	83	
Kahalgaon TPS	237	31	236	44	
TSTPS	287	0	293	38	
NTPC	15631	2066	15989	2263	
Kakrapar APP	574	139	613	132	
Tarapur APP 1&2	1213	114	1179	120	
Tarapur APP 3&4	1868	510	1697	478	
NPCIL	3654	763	3489	730	
SSP	977	200	1247	256	
PENCH	160	33	132	27	
U.I. CHARGES	399	105	305	34	
DODSON I	61	13	44	10	
DODSON II	100	29	70	19	
POWERGRID	0	212	0	222	
RGPPL	4628	1435	3640	1090	
NCE Sources	2003	664	1867	772	
WRPC	0	0	-407	-338	
Income Tax	0	194	0	194	
TOTAL Cheap	73751	13546	73865	12816	
KAWAS LNG	1447	847	982	551	
GANDHAR LNG	421	263	343	202	
TRADING Company	2366	1335	1256	730	
Haryana Swap	2300	1333	1230	730	
Arrangement Swap					
Purchase from HPGCL	149	66	-112	0	
Sale to HPGCL	-135	-51	0	0	
Saic to Hr OCL	-133	-31	U	U	

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	Pet	ition	Approved after	Provisional Truing up
Station	Quantum	Total Cost	Quantum	Total Cost
	MU	Rs crore	MU	Rs crore
RGPPL	949	590	1146	663
TOTAL Costly	5199	3051	3615	2147
TOTAL PP	78951	16597	77479	14963

5.6.2 Power Purchase Quantum and Cost for FY 2008-09

Total Power Purchase Quantum

Based on the projected sales and approved loss levels as discussed above, the total projected power purchase quantum for FY 2008- works out to 90206 MU. The summary of projected power purchase for FY 2008-09 is given in the following Table:

Table: Power Purchase for FY 2008-09

Sl.	Description	Unit	Value
1	Sales for FY 2008-09 as considered by the Commission	MU	65,966
2	Energy Input at MSEDCL boundary considering	MU	84,787
	Distribution Losses		
3	Energy Input at State boundary considering Intra State	MU	89,109
	Transmission Losses		
4	Power Available within the State	MU	66,876
5	Power Required from Outside the State	MU	22233
6	Effective Gross Purchase from outside the State	MU	23,330
	considering External Transmission Losses		

7 Total Quantum of Power Purchase Required (4+6) MU 90,206

Sources of Power Purchase

MSEDCL has two primary sources of firm power, viz.

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

In addition to the above sources, MSEDCL buys power from The Tata Power Company Limited (TPC), Power Trading Corporation (PTC), Ratnagiri Gas and Power Private

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Limited (RGGPL), Trading Companies and other sources such as non-conventional 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 2008-09 is detailed in the following paragraphs.

Power Purchase from MSPGCL

For FY 2008-09, MSEDCL has estimated purchase of 46947 MU from MSPGCL at a total cost of Rs. 7512 Crore. The assumptions considered by MSPGCL for projecting the quantum of power purchase from MSPGCL stations during FY 2008-09 are given in following Table:

.

Particulars	PLF	Auxiliary Consumption
Existing Thermal	72%	9%
New Thermal (Paras & Parli)	80%	9%
Gas Based Station	52.77%	3%

MSEDCL submitted that for estimating the expense on purchase of power from MSPGCL during FY 2008-09, it has considered average rate of Rs 1.60/unit based on the estimated average power purchase cost for FY 2007-08

MSEDCL, in its Petition, further requested the Commission to consider the tariff as approved by the Commission in its Order on APR and Tariff Petition of MSPGCL for estimation of the power purchase expenses for purchase from MSPGCL for FY 2008-09.

The Commission has issued its Order on May 31, 2008 in the matter of Maharashtra State Power Generation Company Ltd.'s (MSPGCL) Petition for approval of Annual Performance Review for FY 2007-08 and Tariff for FY 2008-09 (Case No. 71 of 2007). The Commission has considered the quantum and cost of power purchase by MSEDCL from MSPGCL for FY 2008-09 in accordance with this Order for MSPGCL's existing and new generating stations, as given in the following Table:

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Stations Ouantum Fixed Energy **Total** N (MU) Charges Charges Cost (Rs (Rs Crore) (Rs Crore) Crore) 1 **Existing Thermal Stations** 44258.04 2193.08 6227.85 8420.94 New Paras -1 and New Parli 3183.60 291.07 437.77 728.84 1 Expansion Projects 3 **Existing Hydel Stations** 3934.00 749.70 749.70 Rebate from Hydel Stations -569.13 -569.13 to be kept by MSPGCL Thermal Incentive due to 2.42 2.42 better PLF Total 51375.64 2484.15 6848.62 9332.77

Table: Summary of Approved Power Purchase from MSPGCL for FY 2008-09

In accordance with MERC Tariff Regulations, while approving the cost for power purchase from MSPGCL, the Commission has also additionally considered the incentives for the stations with approved PLF more than 80%, at 25 paise per kWh for excess generation, which is estimated at Rs 2.42 Crore for FY 2008-09.

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. In addition to share from these Central Generating Stations, MSEDCL also buys power from the Eastern Region Stations of NTPC namely, Kahalgaon Thermal Power Station, Farakka Super Thermal Power Station and Talcher Super Thermal Power Station.

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. Further, MSEDCL has considered the following new CGS while projecting the power purchase quantum and costs for FY 2008-09:

• Kahalgaon STPS Stage II Phase-I (Unit-I & Unit-II)

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- Sipat Stage-I (Unit-I)
- Sipat Stage-II (Unit-I and Unit-II)

While projecting the energy availability, MSEDCL assumed the PLF of 80% for NTPC stations. MSEDCL considered the auxiliary consumption for the NTPC and NPC plants based on the norms approved in the CERC/Government guidelines. MSEDCL has projected the quantum of power available from CGS by applying its effective share on 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.

As discussed in above paragraphs on Total Energy Input Requirement, as the Commission has estimated the total quantum of power purchase after grossing up the energy required at MSEDCL level with the intra-State Transmission Losses and External Transmission Losses, the Commission has estimated the Power Purchase Cost based on Energy Sent Out from each CGS. MSEDCL has estimated the fixed charges for CGS on the basis of CERC's Orders and variable cost based on actual variable cost for the period from April to September 2006, including Fuel Price Adjustment (FPA).

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 2008-09. The energy sent out from these stations has been estimated by considering the actual auxiliary consumption achieved by these stations in the previous year.

For Western Region Stations, the Commission has considered the share from unallocated quota based on latest allocation as on February 29, 2008 as specified in Western Region Power Committee notice no. WRPC/Comml-I/6/Alloc/2008/1987 dated February 29, 2006. For Eastern Region Stations, the Commission has considered the percentage allocation of the CGS as per the MSEDCL's projections. For estimating the energy availability from new generating stations, the Commission has considered the expected commercial operation date for these generating stations based on the latest information available on the website of CEA regarding broad status of central sector thermal projects.

The Commission has considered the fixed cost of existing NTPC Stations based on the latest CERC Orders for each respective Station for FY 2008-09. The Commission has

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estimated the variable cost for all the existing stations based on the approved variable charges and the average actual FPA charges for the period from April to February 2008.

For new Central Generating Stations, MSEDCL projected the power purchase costs based on NTPC's Tariff Petition dated September 3, 2007. The Commission, for estimating the power purchase cost from new generating stations has assumed the Fixed Charges and Variable Charges equivalent to the costs projected by MSEDCL. The summary of the expected commercial operation date (COD) of new generating stations, fixed charges and variable charges as projected by MSEDCL and considered by the Commission is shown in the Table below:

Table: Summary of New CGS Stati	ions
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Energy Balance	Unit	MSEDCL	COD		Fixed Charges		Variable Charges	
	Size	Share			(Rs C	Crore)	(Rs/k	(Wh)
	MW	MW	MSEDCL	Considered	MSEDCL	Approved	MSEDCL	Approved
				by				
				Commission				
KahalgaonTPS-II								
Unit-5	500	35	Apr-08	Aug-08	39	21	1.21	1.21
Unit-6	500	35	Apr-08	Nov-08				
KahalgaonTPS-II	500	30	Apr-08	Jan-09	17	4	1.21	1.21
Sipat Stage - II	500	129	Oct-08	Jun-08	120	81	0.55	0.55
Sipat Stage - II	500	129	Oct-08	Nov-08	120	41	0.55	0.55
Sipat Stage - I	660	115	Nov-08	May-09	87	0	0.55	0.00

The Commission also considered incentives for Korba STPS, Vindhyachal 1 STPS, Vindhyachal 2 STPS, Vindhyachal 3 STPS, and Stations of Eastern Sector for the projected generation above 80% PLF, in accordance with the CERC Norms. The total incentive amount payable by MSEDCL for Central Generating Stations for FY 2008-09 is estimated at Rs. 30.78 Crore. The Commission has also considered the Income Tax payable by MSEDCL to Central Generating Stations as Rs 194 Crore as projected by MSEDCL for FY 2008-09.

The summary of total quantum of Power Purchase (ESO basis) and total power purchase cost from each CGS as estimated by MSEDCL in its Petition and as considered by the Commission for FY 2008-09 is given in the following Table:

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Table: Summary of Power Purchase from CGS for FY 2008-09

Station	Pet	ition	Approved		
	Quantum	Total Cost	Quantum	Total Cost	
	MU	Rs Crore	MU	Rs Crore	
Korba STP	5081	435	4960	441	
Vindhyachal STP I	3216	425	3317	464	
Vindhyachal STP II	2555	389	2591	405	
Vindhyachal STP III	1971	353	2269	383	
KAWAS APM	1609	1003	1566	976	
GANDHAR APM	1471	464	1532	479	
Farakka STPP-EP	53	22	496	86	
Farraka STPP-OP	426	74			
Kahalgaon TPS-EP	24	11	264	49	
Kahalgaon TPS-OP	191	39			
TSTPS-EP	30	13	300	38	
TSTPS-OP	241	35			
KahalgaonTPS-II	446	93	245	51	
KahalgaonTPS-II	191	40	48	10	
Sipat Stage - II	517	149	696	119	
Sipat Stage - II	517	149	346	60	
Sipat Stage - I	186	97	0	0	
Sipat Stage - I	0	0	0	0	
NTPC- Sub-Total	18726	3792	18630	3562	
Kakrapar APP	828	169	828	169	
Tarapur APP 1&2	864	81	734	67	
Tarapur APP 3&4	1908	521	2021	558	
NPCIL	3600	771	3583	794	
Income Tax		194		194	
Total	22326	4757	22213	4550	

^{*} Purchase from Kawas and Gandhar has been considered on consolidated basis as the Commission has not considered the approach of costly and non-costly power purchase in this Order

Power Purchase from Sardar Sarovar Project (SSP)

MSEDCL has projected purchase of 977 MU from Sardar Sarovar Project for FY 2008-09 at a total cost of Rs. 200 Crore. MSEDCL has considered the power purchase rate for Sardar Sarovar Project at Rs. 2.05/kWh based on the power purchase bill dated October 10, 2007 raised on MSEDCL from Superintending Engineer (hydro project, design circle).

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For FY 2008-09, the Commission has accepted the quantum of power purchase as projected by MSEDCL. The Commission however, is of the view that the tariff for Sardar Sarovar Project 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 Sardar Sarovar Project, and the Commission shall true-up for any variations in the subsequent years. Thus, the expense for purchase of 977 MU from SSP works out to Rs 200 Crore.

Power Purchase from Pench, Dodson, Wind and Co-Generation Projects

MSEDCL, in its Petition, submitted that it has entered into agreement with all the generators of renewable sources who are approaching MSEDCL, to meet its RPS obligation. MSEDCL submitted that it has considered the estimates of generation made available by Non Conventional Energy (NCE) Sources for FY 2008-09 as per the respective source of generation. However, MSEDCL submitted that most of the generators, especially wind generators, overrate their efficiency, which may result in major shortfall in supply of energy by these generators. As per the RPS mechanism, MSEDCL (and in turn its consumers) will be penalised for miss-declaration of generators and thus, the shortfall in supplying the energy to MSEDCL. MSEDCL requested that the generators may be directed to project realistic efficiency levels so that the projections are reasonable and achievable. Further, MSEDCL requested the Commission to pass specific orders in this petition and direct that the penalty on MSEDCL if any, would be paid by the generators who fall short of supplying energy in comparison to their declared / agreed efficiency levels. MSEDCL submitted that it would fully support and promote the development of non-conventional energy and assured that all such power from nonconventional energy sources will be procured at rates approved by the Commission. MSEDCL requested the Commission to reconsider and review the enforcement clauses for not meeting the RPS target in the light of the fact that it has not refused to procure any non-conventional power available.

MSEDCL has projected power purchase of 2500 MU from non conventional energy sources for FY 2008-09. For projecting the power purchase cost from NCE sources, MSEDCL has considered the average rate of Rs 3.30/kWh for FY 2008-09. For projecting the power purchase cost from NCE sources, the Commission has considered the average rate of Rs 3.30/kWh based on MSEDCL's projection for FY 2008-09. Accordingly, the Commission has considered the power purchase cost for purchase of

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2500 MU from NCE sources at Rs 824 Crore. However, the Commission clarifies that it would deliberate on the issue considering the final settlement of RPS for FY 2008-09, during the final truing-up for FY 2008-09.

MSEDCL, in its Petition, has projected power purchase of 150 MU from Dodson Project (Dodson-I & II) for FY 2008-09. MSEDCL has considered the average tariff of Rs 2.40/kWh for Stage-I and tariff of Rs 2.80/kWh for Stage-II. The Commission has considered the quantum of 150 MU from Dodson Project as proposed by MSEDCL for FY 2008-09. For Dodsan Stage I & II, the Commission has considered the actual power purchase rate for the period April to February 2008. The power purchase cost for purchase of 150 MU from Dodson Project works out to Rs 37 Crore.

MSEDCL has projected power purchase of 139 MU from Pench for FY 2008-09, and considered the average tariff as Rs 2.09/kWh, which has been accepted by the Commission, and the expense on purchase of 139 MU from Pench Project works out to Rs 29 Crore.

Power Purchase from Ratnagiri Gas & Power Private Limited (RGPPL)

MSEDCL submitted that while estimating power purchase expenses of FY 2008-09, it has considered RGPPL as costly source. MSEDCL submitted that, if power from RGPPL is not made available to MSEDCL then the average load shedding hours will increase to 10.10 Hours. So, the beneficiaries of RGPPL power are the Industrial and other ASC paying consumers, who are benefited in terms of reduced load shedding. MSEDCL submitted that though the rate of power from RGPPL is less than Rs 4.00 per unit, it is still costly as compared to the power purchased from MSPGCL and CGS. MSEDCL submitted that the impact of RGPPL is also more important as the quantum of power purchase from RGPPL is quite high in the overall power purchase. MSEDCL requested the Commission to consider power purchase from RGPPL as costly power and allow the recovery of power purchase cost for purchase for power from RGPPL through the ASC mechanism.

The Commission asked MSEDCL to submit the basis and assumptions for projecting the power availability and cost for power purchase from RGPPL for FY 2008-09. MSEDCL, in its reply, submitted that Block-I has been assumed to start from April 1, 2008 and over all PLF of Block-I, II & III has been considered as 65%. MSEDCL submitted that it has

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considered the total capacity charges for all the three blocks of RGPPL as Rs 1530.84 Crore as per the PPA and also considered variable charges of Rs 2.04/kWh. Accordingly, MSEDCL projected the power purchase from Ratnagiri Gas & Power Private Limited (RGPPL) at 11327 MU for FY 2008-09. MSEDCL has estimated power purchase expenses of Rs 3841 Crore at an average power purchase rate of Rs. 3.39/kWh.

The Commission for projecting the energy availability from RGPPL has considered the annual generation target for RGPPL as specified by the Central Electricity Authority (CEA) for FY 2008-09. For projecting the power purchase cost from RGPPL, the Commission has considered the variable charge of Rs 2.04/kWh and capacity charge of Rs 1530.84 Crore based on MSEDCL's projection for FY 2008-09. Accordingly, the Commission has considered the expense on purchase of 12851 MU from RGPPL at Rs 4152 Crore for FY 2008-09.

Power Purchase from Traders

MSEDCL, in its Petition, submitted that it has estimated power purchase of Rs 3500 MU at an estimated expense of Rs 2275 Crore for FY 2008-09 towards purchase from traders.

Considering the total energy input requirement of MSEDCL for FY 2008-09 and projected energy availability from other sources, the Commission in this Order has not considered any power purchase from traders during FY 2008-09. 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.

Purchase from Costly Sources

As regards purchase from costly sources, MSEDCL, in its Petition, has considered the purchase from Traders, Kawas LNG, Gandhar LNG and RGPPL as costly sources and estimated 16691 MU at an estimated power purchase cost of Rs 7328 Crore for FY 2008-09.

The Commission, in this Order, has not considered the purchase from costly and non costly sources separately, due to the following reasons:

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- a) RGPPL power is primarily intended for the State of Maharashtra on a long-term basis. Any such source of power, which is being procured under a long-term PPA, has to be considered as one of the pool sources, to be shared equitably amongst all the consumers in the State, rather than be earmarked for a select few consumers and regions.
- b) The argument that load shedding will increase if power procurement from RGPPL is not undertaken, though true, can be extended to procurement from any source, including MSPGCL or CGS. Moreover, the power procurement from RGPPL is not being denied, it is only the mechanism of recovery of the cost that is being modified.
- c) The rate projected by MSEDCL for power procurement from RGPPL is Rs. 3.6 per kWh, while the Commission has considered the weighted average rate as Rs. 3.40 per kWh based on the higher power purchase considered on the basis of the CEA targets. While introducing the concept of ASC, the Commission has been considering all power sources costing above Rs. 4 per kWh as costly power. While there may be no economic rationale for considering a particular level as the cut-off for such purposes, having established the same, it will be improper to shift the cut-off so that a particular source qualifies as costly power. In the MYT Order also, the Commission bifurcated power procurement from RGPPL into two parts, viz. for the seven month period from April to November, RGPPL power was treated as a costly source, since the rate of power procurement was expected to be around R. 5.01 per kWh, while for the remaining part of the year, the rate of procurement was expected to be around Rs. 3.05 per kWh, and hence, this quantum was considered as non-costly power.

It should be noted that there is no loss to MSEDCL in the context of RGPPL being considered as non-costly power and the ASC matrix being removed, since MSEDCL has been given full recovery of all its power purchase costs, including that from RGPPL power. Thus, in view of the above observations, the Commission has done away with the concept of categorisation of power purchase as costly and non-costly sources, and all the power purchase expenses have been pooled and recovered through the ARR from all the consumers through category-wise tariffs as determined in Section 6 of this Order.

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 loss. Obviously, if the actual sales increase beyond the levels

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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.

External Transmission Charges to PGCIL

MSEDCL has estimated the transmission charges payable to PGCIL at Rs. 264 Crore for FY 2008-09. For projecting the charges payable to PGCIL, MSEDCL has considered Rs 22 Crore/month on account of the increase in amount from January 2008. The Commission has considered the approved transmission charges for inter-State transmission system in Western Region and accordingly considered the latest capacity allocation of transmission system for estimating the transmission charges for FY 2008-09. Accordingly, the Commission has estimated the external transmission charges of Rs 265.08 Crore for FY 2008-09. The Commission has also considered the charges payable to Western Regional Power Committee as Rs 0.07 Crore as projected by MSEDCL for FY 2008-09.

Transmission Charges

The Commission has also issued the Transmission Tariff Order in Case No. 104 of 2007 on May 31, 2008, wherein the transmission tariff payable by MSEDCL for use of the intra-State transmission system has been determined at Rs. 1785.98 Crore for FY 2008-09, and the Commission has considered the same while determining the ARR for FY 2008-09.

SLDC Charges

MSEDCL has not estimated any expenditure towards SLDC charges. However, the Commission in the matter of Case No. 88 of 2007 has approved MSEDCL's share of the SLDC's Budget for FY 2008-09 at Rs.12.27 Crore through its Order dated May 30, 2008. The Commission has considered the same for determining the SLDC charges to be paid by MSEDCL for FY 2006-07. The total approved power purchase expenses for FY 2008-09 including transmission charges are as tabulated below:

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Source	MS	EDCL	Approved		
	Power Purchase Quantum	Power Purchase Cost	Power Purchase Quantum	Power Purchase Cost	
	MU	Rs. Crore	MU	Rs. Crore	
MSPGCL	46947	7512	51376	9333	
CGS	22326	4757	22213	4550	
Sardar Sarovar Project	977	200	977	200	
RGPPL	11327	3841	12851	4152	
Other Sources (Pench, Wind, Dodson,			2789	890	
Cogen etc.)	2789	893			
UI Charges	-	-	-	-	
Traders	3500	2275			
Transmission Charges of PGCIL		264.07		265	
Sub-Total	87866	19743	90206	19390	
SLDC Charges				12	
Transmission charges paid to					
transmission licensee		1472		1786	
Total	87866	21214	90206	21189	

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. 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 on a post-facto basis and on a bi-monthly 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.

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5.6.3 Month-wise Power Purchase Quantum for FY 2008-09

The summary of month wise power purchase quantum approved by the Commission based on trends of month-wise energy input requirement in FY 2006-07 is given in the Table below:

Table: Month-wise Power Purchase Quantum (MU) for FY 2008-09

Particulars	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Power													
Purchase													
(MU)	7402	7630	7715	7376	7257	7292	7822	7681	7558	7733	7429	7311	90206

5.6.4 Demand Side Management (DSM) Mechanism

The Commission directs MSEDCL to adopt Demand Side Management Measures (DSM) and reduce the demand for power in its license area. The cost of such DSM projects shall be allowed by the Commission as a part of the Annual Revenue Requirement of MSEDCL, which would be more than offset by the savings in power purchase cost due to reduction in demand. However, this should not be interpreted to mean that load shedding should be increased, which in any case, is a load management solution and not a DSM measure, undertaken to reduce the demand at the consumer end, through incorporation of appropriate energy efficiency and energy conservation measures.

5.7 O&M Expenses for FY 2007-08 and FY 2008-09

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

5.7.1 Employee Expenses

MSEDCL submitted that the estimated employee expenditure for FY 2007-08 and FY 2008-09 was Rs. 1644 crore and Rs. 1791 crore, as compared to net employee expenditure of Rs. 1572.41 Cr and Rs 1656.66 Cr approved by the Commission for the respective years.

MSEDCL submitted that the actual Net Employee expenditure for FY 2006-07 was Rs. 1922.02 Crore as per the audited accounts. The net employee expenditure estimated for

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FY 2007-08 is marginally higher by around 4.55% over the approved amount of Rs. 1572 Crore. At the same time, the estimated expense for FY 2007-08 represents a reduction of 14.5% over the actual expense in FY 2006-07, which is mainly due to the first time provisioning of Rs. 440.23 Crore made in FY 2006-07 for Leave Encashment shifting from cash to accrual basis of accounts. If this provision is deducted from the previous year's expense, the net increase over FY 2006-07 levels works out to 10.65%, which pertains to the increase in dearness allowance and provident fund contribution.

MSEDCL submitted that the pay revision of MSEDCL's employees is due from April 1, 2008. MSEDCL submitted that the financial implication of the same cannot be projected, since the discussions with the unions are yet to commence, and hence, the effect of payrevision has not been considered for FY 2008-09. MSEDCL added that the impact of the recommendations of the study on 'review of staffing pattern' have not been considered in the APR Petition.

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

- Basic Salary based on the actual expenses incurred till September 2007 and the expected inductions/retirements during the balance year, it is estimated that a total sum of Rs. 616.91 Cr. shall be spent on basic salaries, after considering the annual increment at 4%.
- § The major increase is due to the increase in Dearness Allowance (DA) and Provident Fund Contribution. The Dearness Allowance is computed as a percentage of the basic salary; D.A. is estimated @85% of basic, which is computed as weighted average of monthly dearness allowances paid.
- § Overtime Payment and other Allowances Overtime is payable only for the line staff in the field, the incidence of which is also not very high. Accordingly, the overtime payment has been projected to increase at the nominal rate of 4% p.a. over the previous year's level.
- § Leave Encashment Only the incremental provisioning has to be done in FY 2007-08, since the first-time provisioning has been done in FY 2006-07. Hence, Rs. 111 Crore has been considered towards provision of earned leave encashment for FY 2007-08. For the year 2008-09 4% increase has been assumed.
- § Staff Welfare Expenses Staff welfare expenses are estimated at Rs. 13.34 Cr. For projecting the staff welfare expenses for FY 2008-09 an amount of 1 Cr has been added on the part of "Group Personal Accident Policy" to cover all

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- employees of MSEDCL in case of injuries/death occurred while in the service of Company.
- § Employee Training As per the training policy of Government of India, Ministry of Power, it is expected that all the employees working in the Distribution Utilities should undergo minimum 7 days of training every year for the employees who are already working. And for newly recruited engineers a minimum of 3 months Induction Level Training is mandatory as per the Indian Electricity Rules 1956 amended in the year 2006; and 6 weeks Induction Level Training programmes for Technicians and Non-executives i.e. LDC/UDC/meter Readers etc., is also recommended. A budget of around Rs.8 Cr has been proposed for training purpose in FY 2008-09.
- § Employee Incentive and Disincentive Scheme MSEDCL has budgeted for Rs. 50 crore to implement the Employee Incentive/Disincentive Scheme to curb the power theft and reduce the distribution losses to the normative levels.
- § Capitalization of Employee Cost Considering the percentage of capitalization on gross employee expenses for FY 2006-07, the same percentage of 5.65% has been applied for estimating employee capitalization for FY 2007-08 and FY 2008-09.

For FY 2007-08 and FY 2008-09, the Commission has accepted MSEDCL's projections for each sub-head of employee expenditure, since the projections were very close to the projections by considering inflationary increase of around 6.26% over the revised level of employee expenses as approved for FY 2006-07 under the truing up exercise in this Order, based on the increase in Consumer Price Index (CPI). The Commission will undertake the final truing up of employee expenses for FY 2007-08 based on actual employee expenses for the entire year and prudence check, during the APR process for FY 2008-09. Moreover, one-fifth of the provisioning towards earned leave encashment in FY 2006-07 (one-fifth of Rs. 440 crore) has been added to the projected employee expenses for FY 2007-08 and FY 2008-09, in accordance with the Commission's ruling on this issue for FY 2006-07, as elaborated in Section 4 of this Order. The capitalisation has been considered at 5.65% based on the actual capitalisation in FY 2006-07. Accordingly, the approved employee expenses for FY 2007-08 and FY 2008-09 is summarised in the following Table:

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Particulars		FY 2007-0	8	FY 2008-09			
	MYT	Revised	Approved	MYT	Revised	Approved	
	Order	Estimate	After	Order	Estimate		
		by	provisional		by		
		MSEDCL	truing up		MSEDCL		
Gross employee expenses	1655.17	1742.28	1830.33	1743.86	1898.10	1986.15	
Less: Capitalisation	82.76	98.39	103.41	87.19	107.24	112.22	
Net employee expenses	1572.41	1643.89	1726.91	1656.66	1790.86	1873.93	

Table: Approved Employee Expenses for FY 2007-08 & FY 2008-09 (Rs. Crore)

5.7.2 A&G Expenses

MSEDCL submitted that the net A&G expenses have been estimated as Rs 171.55 Cr and Rs 235.16 Cr for FY 2007-08 and FY 2008-09, respectively, as compared to the approved expenses of Rs. 116 crore and Rs. 122 crore, for the respective years. This shows an increase of approximately 16% in A&G expenses in FY 2007-08 over the actual expenses in FY 2006-07.

MSEDCL submitted that annual increase of 7.5% has been considered over the actual expenses in FY 2006-07, for most of the expenses heads. MSEDCL submitted that the actual A&G expenses of Rs 147.85 Cr in FY 2006-07, which is much higher than the expenses approved by the Commission, cannot be taken as representative, because the newly created divisions and subdivisions came up gradually during the year, therefore the A&G expenses on account of these divisions and subdivisions will show an increase in the subsequent years. MSEDCL added that in case of conveyance and travel, computer stationery expenses, advertisement expenses, vehicle running and vehicle hire expenses, an increase of 25 % over previous year expenses has been considered because of creation of new circle, divisions and sub-divisions. Similarly, in case of rent, rates and taxes, 12% increase over previous year's expenses has been considered.

For FY 2007-08, the Commission has considered an increase of around 5.29% on account of inflation over the revised level of A&G expenses as approved for FY 2006-07 in this Order, based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) and CPI numbers for Industrial Workers (as per Labour Bureau, Government of India) for a period of 3 years, i.e., FY 2004-05 to FY 2006-07, to smoothen the inflation curve. The Commission has considered

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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 2007-08 based on actual A&G expenses for the entire year and prudence check, during the APR process for FY 2008-09.

For FY 2008-09, for each sub-head of A&G expenditure, the Commission has considered an increase of around 5.29% on account of inflation over the revised level of A&G expenses as approved for FY 2007-08 under the provisional truing up exercise in this Order, based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). The capitalisation has been considered at the same percentage as actually done in FY 2006-07. Accordingly, the approved A&G expenses for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Particulars		FY 2007-0	8	FY 2008-09			
	MYT	Revised	Approved	MYT	Revised	Approved	
	Order	Estimate	After	Order	Estimate		
		by	provisional		by		
		MSEDCL	truing up		MSEDCL		
Gross A&G expenses	122.94	240.11	217.89	129.55	328.90	252.81	
Less: Capitalisation	7.38	68.56	62.22	7.77	93.74	72.19	
Net A&G expenses	115.57	171.55	155.67	121.78	235.16	180.62	

5.7.3 R&M Expenses

MSEDCL submitted that the R&M expenses have been estimated as Rs 447 Cr and Rs 481 Cr for FY 2007-08 and FY 2008-09, respectively, as compared to the approved expenses of Rs. 359 crore and Rs. 378 crore, for the respective years. MSEDCL submitted that the actual R&M expenditure of Rs 416.26 Crore in FY 2006-07, amounts to 4.38% of the opening GFA of FY 2006-07 (Rs. 9508 Crore), as compared to the 3% of opening GFA considered by the Commission.

MSEDCL submitted that the need for significant R&M works arises mainly due to ageing effect and non-attendance to the critical R&M needs in the past owing to paucity of funds. MSEDCL added that the projected 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 guardings,

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crimping of jumpers at cut points, Labour charges on all above, etc. MSEDCL further submitted that most of the distribution network is overhead and 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 the circumstances, reduction in life cycle and frequent maintenance is inevitable and the expenditure requirement will be high.

For FY 2007-08, for each sub-head of R&M expenditure, the Commission has considered an increase of around 4.65% on account of inflation over the revised level of R&M expenses as approved for FY 2006-07 under the truing up exercise in this Order, based on the increase in Wholesale Price Index (WPI). The Commission has considered the point to point inflation over WPI numbers (as per Office of Economic Advisor of Govt. of India) for a period of 3 years, i.e., FY 2004-05 to FY 2006-07, to smoothen the inflation curve. The Commission will undertake the final truing up of R&M expenses for FY 2007-08 based on actual R&M expenses for the entire year and prudence check, during the APR process for FY 2008-09.

For FY 2008-09, for each sub-head of R&M expenditure, the Commission has considered an increase of around 4.65% on account of inflation over the revised level of R&M expenses as approved for FY 2007-08 under the provisional truing up exercise in this Order, based on the increase in Wholesale Price Index (WPI), as detailed above. Accordingly, the approved R&M expenses for FY 2007-08 and FY 2008-09 is summarised in the following Table:

Table: Approved R&M Expenses for FY 2007-08 & FY 2008-09 (Rs. Crore)

Particulars	FY 2007-08			FY 2008-09		
	MYT Revised Approved		MYT	Revised	Approved	
	Order	Estimate	After	Order	Estimate	
		by	provisional		by	
		MSEDCL	truing up		MSEDCL	
Net R&M expenses	359	447	436	378	481	456
The Recivi expenses	337	4-17	450	370	401	420

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5.8 Capital expenditure and capitalisation

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

(Rs Cr)

Particulars	FY	2007-08	FY 2008-09		
	MYT Order Revised Estimate M		MYT	Revised Estimate	
		by MSEDCL	Order	by MSEDCL	
Capital Expenditure	1264.00	2253.15	1080.91	6601.72	
Capitalisation	1215.46	2071.74	1414.03	5123.52	

The Commission, in the MYT Order, approved capital expenditure of Rs 1264.00 Crore for FY 2007-08 and Rs 1080.91 Crore for FY 2008-09. Against this, MSEDCL projected revised estimate of capital expenditure of Rs 2253.15 Crore and Rs 6601.72 Crore for FY 2007-08 and FY 2008-09, respectively.

As regards capitalisation, the Commission in the MYT Order has approved capitalisation of Rs 1215.46 Crore for FY 2007-08 and Rs 1414.03 Crore for FY 2008-09, based on the then approved scheme-wise capital expenditure and capitalisation. Against this, MSEDCL projected revised estimate of capitalisation of Rs 2071.74 Crore for FY 2007-08 and Rs 5123.52 Crore for FY 2008-09.

As per Regulations 59.3 and 71.3 of the Commission's Tariff Regulations, 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. Accordingly, for the purpose of APR exercise for FY 2007-08 and revised projection for FY 2008-09, the Commission has considered capital expenditure and capitalisation of the DPR schemes that have already been approved by the Commission.

However, the Commission would like to reiterate that in-principle approval of the scheme does not absolve the senior management of MSEDCL of their responsibility to prioritise various schemes and undertake cost benefit analysis and financial analysis to validate the

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commercial prudence of each scheme. MSEDCL should ensure that the projected benefits actually accrue for the benefit of the stakeholders. It would be essential to monitor progress of each scheme as well as track expenditure and benefits accrued as per the scheme. The Commission believes that close monitoring of scheme-wise capital expenditure and capitalisation of each scheme would enable MSEDCL to provide capital outlay related projections as close to reality, for the purpose of APR exercise.

In this context, though the Commission had asked MSEDCL to submit the actual status of capital expenditure and capitalisation in FY 2007-08, MSEDCL has not submitted the same till date. Given the ambitious target of capital expenditure that MSEDCL has set itself, MSEDCL's inability to track scheme-wise capital expenditure is not too comforting. Since the Commission has no additional data on which to modify the projections of capital expenditure and capitalisation considered in the MYT Order, the Commission has retained the same in this Order also, though the capital expenditure has been considered in accordance with the expenditure approved by the Commission for different schemes. The same will be modified at the time of final truing up for FY 2007-08 only if MSEDCL submits the necessary scheme-wise details of capital expenditure and capitalisation and project status and costs vis-à-vis the Commission's approval. Accordingly, approved capital expenditure and capitalisation for FY 2007-08 and FY 2008-09 is summarised in the following table:

(Rs Cr)

Particulars		FY 2007-08		FY 2008-09			
	MYT Revised Approved Order Estimate		MYT Order	Revised Estimate	Approved		
		by MSEDCL			by MSEDCL		
Capital							
Expenditure	1264.00	2253.15	1353.20	1080.91	6601.72	2471.35	
Capitalisation	1215.46	2071.74	1215.46	1414.03	5123.52	1414.03	

5.9 Depreciation

The Commission, in the MYT Order, had permitted depreciation to the extent of Rs 388.71 Crore for FY 2007-08 and Rs 435.38 Crore for FY 2008-09, which amounts to 3.88% of Opening level of Gross Fixed Assets (GFA) of MSEDCL for FY 2007-08 and FY 2008-09, respectively. The opening GFA was stated at Rs 10025.40 Crore for FY

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2007-08 and Rs 11228.86 Crore for FY 2008-09. The depreciation rates were considered as prescribed under MERC (Terms and Conditions of Tariff) Regulations, 2005.

MSEDCL, in its APR Petition, submitted the revised estimate for depreciation for FY 2007-08 and FY 2008-09 as Rs 388.16 Crore and Rs 463.13 Crore, respectively, at an overall depreciation rate of 3.69% corresponding to opening GFA of 10530.78 Crore and Rs 12565.00 Crore respectively.

(Rs Cr)

Particulars	FY	2007-08	FY 2008-09		
	MYT Order	Revised Estimate	MYT	Revised Estimate	
		by MSEDCL	Order	by MSEDCL	
Depreciation	388.71	388.16	435.38	463.13	
Opening GFA	10025.40	10530.78	11228.86	12565.00	
Depn as % of Op. GFA	3.88%	3.69%	3.88%	3.69%	

The Commission has examined the depreciation and actual capitalisation claimed by MSEDCL in detail as against the various capex schemes approved by the Commission. Further, MSEDCL in its additional submissions confirmed that depreciation has not been claimed beyond 90% of the asset value in line with the Tariff Regulations. In view of revised value of capitalisation as approved under previous paragraphs, the approved depreciation expenditure for FY 2007-08 and FY 2008-09 is summarised in the following table:

(Rs Cr)

Particulars		FY 2007-08	8	FY 2008-09			
	MYT	Revised	Approved	MYT	Revised	Approved	
	Order	Estimate		Order	Estimate		
		by			by		
		MSEDCL			MSEDCL		
Depreciation	388.71	388.16	383.53	435.38	463.13	427.87	
Opening GFA	10025.40	10530.78	10370.51	11228.86	12565.00	11573.97	
Depn as % of Op.	3.88%	3.69%	3.70%	3.88%	3.69%	3.70%	
GFA	J.00 /0	J.07/0	3.70 /0	J.00 /0	3.09 /0	3.70 /0	

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The Commission will undertake the truing up of Depreciation based on actual expenditure during the entire year, subject to prudence check, during Performance Review for the second year of Control Period, i.e., FY 2008-09.

5.10 Interest Expenses

The Commission, in the MYT Order, had permitted net interest expense to the extent of Rs 261.22 Crore for FY 2007-08 and Rs 322.57 Crore for FY 2008-09. Loan additions of Rs 891.26 Crore and Rs 1055.21 Crore were considered in the MYT Order for FY 2007-08 and FY 2008-09, respectively.

MSEDCL, in its APR Petition, submitted revised estimate for net interest expense for FY 2007-08 and FY 2008-09 as Rs 421.58 Crore and Rs 679.18 Crore, respectively, as summarised in the following Table:

(Rs Cr)

Particulars	FY	2007-08	FY	2008-09
	MYT Order	Revised Estimate	MYT	Revised Estimate
		by MSEDCL	Order	by MSEDCL
Op. balance of loan	2251.31	2687.26	2758.93	4862.34
Loan Addition	891.26	2592.03	1055.21	5709.75
Loan Repayment	(383.64)	(416.95)	(340.25)	(392.35)
Cl. Balance of loan	2758.93	4862.34	3473.89	10179.74
Gross Interest	261.22	457.40	322.57	816.47
Expense	201.22	437.40	322.37	010.47
Less IDC (existing		(22.01)		(23.86)
loan)		(22.01)		(23.00)
Less IDC (new loan)		(13.81)		(113.44)
Net Interest expense	261.22	421.58	322.57	679.18

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

- a) The capital investment plan for FY 2006-07 and for the Control Period (FY 2007-08 to FY 2009-10) was prepared based on the estimated project cost of each scheme and envisaged schedule of execution of each scheme.
- b) The financing plan linked to the Capitalisation Plan is prepared based on existing approved funding and limitations in terms of infusion of equity or internal

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accruals. Accordingly, it has proposed a scheme-wise funding plan. The sources for funding capex scheme include REC, PFC, Other loans, Loan from GOM, Grant and Internal accruals.

c) The equity contribution or funding through internal accruals has varied from 10% to 21.1%. Accordingly, loan drawal component has varied from 90% to 79%.

Further, MSEDCL projected the drawal of new loans at an estimated interest rate of 11.5% p.a. during FY 2007-08 and FY 2008-09.

The Commission has considered the means of finance and other terms for existing loans and new loans as proposed by MSEDCL. However, the Commission has considered the interest expense only for the loans corresponding to assets proposed to be capitalised during FY 2007-08 and FY 2008-09 as against MSEDCL's methodology of computing interest on entire loan drawn to fund capital expenditure during the year and later deducting interest capitalisation to arrive at net interest expense chargeable to revenue account for the purpose of ARR. The interest expense on loans prior to the commissioning of assets needs to be considered as interest during construction (IDC) and capitalised to form part of capitalised cost and hence, scheme-wise accounting of funding plan and interest expense thereof is essential.

Accordingly, approved interest expense for FY 2007-08 and FY 2008-09 is summarised in the following table:

(Rs Cr)

Particulars		FY 2007-08		FY 2008-09		
	MYT	Revised	Approved	MYT	Revised	Approved
	Order	Estimate		Order	Estimate	
		by			by	
		MSEDCL			MSEDCL	
Op. balance of loan	2251.31	2687.26	2053.38	2758.93	4862.34	2804.36
Loan Addition	891.26	2592.03	1063.53	1055.21	5709.75	1237.27
Loan Repayment	(383.64)	(416.95)	(312.54)	(340.25)	(392.35)	(315.19)
Cl. Balance of loan	2758.93	4862.34	2804.36	3473.89	10179.74	3726.44
Gross Interest Expense	261.22	457.40	236.77	322.57	816.47	346.62
Less IDC		(22.01)	*		(23.86)	*

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(existing loan)						
Less IDC		(13.81)			(113.44)	
(new loan)		(13.01)			(113.44)	
Net Interest	261.22	421.58	236.77	322.57	679.18	346.62
Expense	201.22	421.50	230.77	344.51	0/9.10	340.02

^{*} As highlighted earlier, IDC on new borrowings has been considered as part of capitalised asset value and subsequently, interest expense is computed only for loans corresponding to assets put to use.

5.11 Advance against depreciation

MSEDCL sought approval for advance against depreciation for FY 2007-08 in line with the conditions stipulated under the Commission's Tariff Regulations. As per Regulation 62.3 and 74.3 of MERC (Terms and Conditions of Tariff) Regulations, 2005, where the actual amount of loan repayment in any financial year exceeds the amount of depreciation allowable under Regulation 63.4.2 and 76.4.2, the distribution licensee shall be allowed an advance against depreciation for the difference between the actual amount of such repayment and the allowable depreciation for such financial year. Accordingly, Advance against Depreciation (AAD) projected by MSEDCL and approved by the Commission for FY 2007-08 and FY 2008-09 is as under:

(Rs Cr)

Particulars	FY 2007-08			FY 2008-09		
	MYT	Revised	Approved	MYT	Revised	Approved
	Order	Estimate by		Order	Estimate by	
		MSEDCL			MSEDCL	
Depreciation	388.71	388.16	383.53	435.38	463.13	427.87
Loan Repayment	383.64	416.95	312.54	340.25	392.35	315.19
Advance against depreciation (AAD)	0.00	28.78	0.00	0.00	0.00	0.00
Depreciation incl. AAD	388.71	416.95	383.53	435.38	463.13	427.87

5.12 Other Interest & Finance Charges for FY 2007-08 and FY 2008-09

MSEDCL submitted that the normative working capital requirement for FY 2007-08 and FY 2008-09 computed in accordance with the MERC (Terms and Conditions of Tariff)

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Regulations, 2005, works out to Nil. MSEDCL added that MSEDCL has also calculated the interest on working capital requirement due to the shortfall in collection efficiency. For this purpose, MSEDCL considered a shortfall of 6% and 5% in collection efficiency in FY 2007-08 and FY 2008-09, respectively. For computing the interest, an interest rate of 12.25% has been considered as per latest SBI PLR, which translates into interest amount of Rs 67 Cr and Rs 53 Cr in FY 2007-08 and FY 2008-09, respectively.

MSEDCL submitted that the Other Interest and Finance Charges comprises guarantee charges, bank and other charges, interest on security deposit, stamp duty and service fee, as discussed below:

- Suarantee Charges Guarantee Charges for existing loans only has been worked out against the loans, which are under GoM Guarantee, viz., includes the loans from PFC, REC and Canara Bank. The guarantee charges have been computed 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: Bank charges have been computed @ 1% of LC charges assumed to be revolving three times in a year. Further, it is also assumed that additional LC will be provided to MSPGCL, MSETCL and other Power Traders over and above the existing bank charges.
- § Interest on Consumer Deposits: The interest on consumer security deposits for FY 2007-08 and FY 2008-09 has been estimated by considering 10% increase in security deposit from consumers over the amount of security deposit of Rs. 2239.36 Crore upto FY 2006-07, and considering an interest rate of 6% thereon, which is the prevailing bank rate of interest.

Accordingly, MSEDCL projected the interest and finance charges for FY 2007-08 and for FY 2008-09 as tabulated below:

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Table: MSEDCL Projections of Other Interest and Finance Charges

Rs. Crore

	FY 2006-07	FY 2007-08	FY 2008-09
Interest on Security Deposit	107.9	150.6	165.7
Guarantee Charges	32.259	32.259	32.259
Finance Charges	41.18	71.21	74.77
Stamp Duty	1.00	1.05	1.10
Service Fee	0.05	0.05	0.06
Total Other Interest & Finance Charges	182.35	255.22	273.90

The Commission has estimated the working capital requirement of MSEDCL for FY 2007-08 and FY 2008-09, in accordance with the Commission's Tariff Regulations. Since the working capital requirement works out to be negative, no working capital interest has been allowed. As regards MSEDCL's submission that working capital interest should be considered due to the shortfall in collection efficiency, the Commission has not allowed the same since there is no such provision in the Commission's Tariff Regulations. Further, the normative working capital requirement is already being considered, though in MSEDCL's case, the normative working capital requirement works out to be negative, as discussed above, because of the credit available on the power purchase expense and the consumers' security deposit with 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 Commission's Tariff Regulations. The Commission has accepted MSEDCL's projections of Other Interest and Finance Charges comprises guarantee charges, bank and other charges, stamp duty and service fee.

The approved interest on working capital and consumers' security deposit for MSEDCL for FY 2007-08 and FY 2008-09 is given in the following Table:

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Table: Other Interest & Finance Charges for FY 2007-08 & FY 2008-09 (Rs Crore)

Particulars	FY 2007-08			FY 2008-09		
	MYT Order	Revised Estimate by MSEDCL	Approved After provisional truing up	MYT Order	Revised Estimate by MSEDCL	Approved
Interest on Working Capital	0	0	0	0	0	0
Interest on loan due to shortfall in collection efficiency	0	67	0	0	53	0
Interest on consumers' security deposits	153	151	148	172	166	163
Other Interest & Finance Charges	132	105	105	114	108	108
Total Other Interest & Finance Charges	285	322	252	285	327	271

5.13 Contribution to Contingency Reserves for FY 2007-08 and FY 2008-09

MSEDCL estimated the contribution to contingency reserve as 0.5% of opening GFA for FY 2007-08 and FY 2008-09, amounting to Rs. 53 crore and Rs. 63 crore, respectively, in accordance with the Commission's Tariff Regulations.

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

"50.7.1 Where the Distribution Licensee has made an appropriation to the Contingencies Reserve, a sum not less than 0.25 per cent and not more than 0.5 per cent of the original cost of fixed assets shall be allowed towards such appropriation in the calculation of aggregate revenue requirement:

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

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

As discussed in the paragraphs on truing up for FY 2006-07, MSEDCL has submitted the documentary evidence of investment of the contingency reserve in the approved securities, as stipulated in the Tariff Regulations.

The ARR of the Distribution Licensees is eventually recovered from the retail consumers through the Distribution Licensees' tariff. Considering that the overall tariff increase at the retail level is significant, in view of various developments discussed in detail in the respective Tariff Orders, the Commission has decided to provide for contingency reserves for all transmission licensees and distribution licensees at the minimum rate of 0.25% of opening GFA, as permitted under the Commission's Tariff Regulations, rather than 0.5% of opening GFA as claimed by the licensees. Since the MYT Order had considered the contingency reserves for FY 2007-08 as 0.5% of opening GFA, no change has been made to the same. However, for FY 2008-09, the Commission has considered the contribution to contingency reserves at 0.25% of opening GFA, after considering the actual capitalisation and revised estimate of capitalisation for these years, as discussed in earlier paragraphs. The contribution to contingency reserve has thus, been allowed as Rs. 52 crore and Rs. 29 crore for FY 2007-08 and FY 2008-09, respectively.

5.14 Other Expenses

MSEDCL submitted that it incurs other expenses on account of interest to suppliers/contractors, compensation for injuries, death and damages to staff and outsiders and miscellaneous charges, etc. MSEDCL estimated the other expenses for FY 2007-08 and FY 2008-09 at Rs. 4.84 Crore and Rs. 5.08 Crore, respectively. The Commission has allowed these other expenses, which will be trued up based on audited accounts.

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5.15 Provisioning for Bad Debts

In the APR Petition, MSEDCL submitted that the provisioning for bad debts has been considered as 1.5% of revenue for FY 2007-08 and FY 2008-09, which works out to Rs. 279 Crore and Rs. 269 Crore, respectively.

For FY 2007-08 and FY 2008-09, the Commission has allowed the provisioning for bad debts at 1.5% of revenue for FY 2007-08 and FY 2008-09, which works out to Rs. 267 Crore and Rs. 335 Crore, respectively.

5.16 Incentives and Discounts

In the APR Petition, MSEDCL projected the expenditure towards incentives and discounts, for FY 2007-08 and FY 2008-09 as Rs. 75 crore and Rs. 79 crore, respectively. The Commission has accepted MSEDCL's projections in this regard.

5.17 Return on Equity (RoE)

The Commission, in the MYT Order, had permitted return on equity to the extent of Rs 409.04 Crore for FY 2007-08 and Rs 430.08 Crore for FY 2008-09, at rate of return of 16% in accordance with Regulations 63.1 and 76.1 of MERC (Terms and Conditions of Tariff) Regulations, 2005. MSEDCL, in its APR Petition, submitted revised estimate for return on equity for FY 2007-08 and FY 2008-09 as Rs 563.46 Crore and Rs 634.90 Crore, respectively.

(Rs Cr)

Particulars	FY	2007-08	FY 2008-09	
	MYT Order	Revised Estimate	MYT	Revised Estimate
		by MSEDCL	Order	by MSEDCL
Regulatory Equity at the beginning of the year	2495.74	3390.77	2617.29	3652.45
Equity portion of assets capitalised	121.55	261.69	141.40	631.30
Regulatory Equity at the end of the year	2617.29	3652.45	2758.69	4283.75
Return on Regulatory Equity at the beginning of the year	399.32	542.52	418.77	584.39
Return on Equity	9.72	20.93	11.31	50.50

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Particulars	FY	2007-08	FY 2008-09		
	MYT Order	Revised Estimate	MYT	Revised Estimate	
		by MSEDCL	Order	by MSEDCL	
portion of capital					
expenditure Capitalise					
Total Return on	409.04	563.46	430.08	634.90	
Regulatory Equity	707.UT	303.40	450.00	034.70	

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%. Further, MSEDCL has computed RoE on the opening equity as well as on the equity portion of the capitalisation during the year.

Accordingly, the Commission has computed the RoE for FY 2007-08 and FY 2008-09 on the opening balance of equity as well as equity component of the asset to be capitalised during the year in accordance with the Tariff Regulations 63.1 and Regulation 76.1 as applicable for the distribution business. Accordingly, approved Return on Equity for FY 2007-08 and FY 2008-09 is summarised in the following table:

(Rs Cr)

Particulars	FY 2007-08			FY 2008-09		
	MYT Order	Revised Estimate by MSEDCL	Approved	MYT Order	Revised Estimate by MSEDCL	Approved
Regulatory Equity at the beginning of the year	2495.74	3390.77	3392.10	2617.29	3652.45	3544.03
Equity portion of assets capitalised	121.55	261.69	151.93	141.40	631.30	176.75
Regulatory Equity at the end of the year	2617.29	3652.45	3544.03	2758.69	4283.75	3720.78
Return on Regulatory Equity at the beginning of the year	399.32	542.52	542.74	418.77	584.39	567.04
Return on Equity portion of capital expenditure	9.72	20.93	12.15	11.31	50.50	14.14

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Particulars	FY 2007-08			FY 2008-09		
	MYT	Revised	Approved	MYT	MYT Revised	
	Order	Estimate		Order	Estimate	
		by			by	
		MSEDCL			MSEDCL	
Capitalised						
Total Return on Regulatory Equity	409.04	563.46	554.89	430.08	634.90	581.18

5.18 Income Tax for FY 2007-08 and FY 2008-09

MSEDCL submitted that it had considered the same values of Income Tax for FY 2007-08 and FY 2008-09 as approved by the Commission in the MYT Tariff Order dated May 18, 2007, which amounts to Rs. 86 crore in each of the years.

Based on data sought by the Commission, MSEDCL has confirmed that it has not paid any income tax or advance tax for FY 2007-08, and hence, the Commission has not considered any expenditure towards income tax for FY 2007-08, since the same is based on the actual payment. For FY 2008-09, the Commission has retained the provisioning in this regard as Rs. 86 crore, which will be trued up based on actual income tax paid by MSEDCL.

5.19 Non-Tariff Income for FY 2007-08 and FY 2008-09

MSEDCL submitted that non-tariff income for MSEDCL comprises 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 72% of the total amount. MSEDCL projected the total non-tariff income for FY 2007-08 and FY 2008-09 as Rs. 904.21 Crore and Rs 1074.23 Crore, respectively. MSEDCL submitted that the reduction in non-tariff income is envisaged due to reduction in the interest on other investments. Further, for estimating Non-Tariff income for FY 2008-09, an escalation of 18.80% has been considered over the amount estimated for FY 2007-08, which is mainly on account of considering a 20.84% increase in the income from interest on delayed payments.

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Further, the interest on Contingency Reserve Funds is also included in the Non tariff income.

The Commission has accepted MSEDCL's projections of Non-Tariff Income, and will undertake the truing up of Non Tariff Income based on audited accounts during Performance Review for the second year of Control Period, i.e., FY 2008-09.

5.20 Annual Revenue Requirement of MSEDCL for FY 2007-08 and FY 2008-09

Based on analysis of each element discussed above, the Aggregate Revenue Requirement of MSEDCL for FY 2007-08 and FY 2008-09 as approved by the Commission in its MYT Order, as estimated by MSEDCL in the APR Petition and as approved by the Commission in this Order is given in the following Tables:

Table: Aggregate Revenue Requirement for FY 2007-08 (Rs Crore)

		FY 2007-08				
Sl.	Particulars	MYT Order	Revised Estimate by MSEDCL	Approved after provisional truing up		
1	Power Purchase Expenses	14633	16597	14963		
2	Operation & Maintenance Expenses					
2.1	Employee Expenses*	1572	1644	1727		
2.2	Administration & General Expenses*	116	172	156		
2.3	Repair & Maintenance Expenses	359	447	436		
3	Depreciation, including advance against depreciation	389	417	384		
4	Interest on Long-term Loan Capital	261	422	237		
5	Interest on Working Capital, consumer security deposits and Finance Charges*	285	255	252		
6	Provision for Bad Debts*	267	325	267		
7	Other Expenses	2	5	5		
8	Income Tax	86	86	0		
9	Intra-State Transmission Charges	1460	1471	1460		
11	Contribution to contingency reserves	50	53	52		
13	Incentives/Discounts	66	75	75		

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		FY 2007-08				
Sl.	Particulars	MYT Order	Revised Estimate by MSEDCL	Approved after provisional truing up		
14	Interest on Working Capital required on account of shortfall of Collection Efficiency		67	0		
15	Total Revenue Expenditure	19546	22036	20013		
16	Return on Equity Capital	409	563	555		
17	Aggregate Revenue Requirement	19955	22599	20568		
19	Less: Non Tariff Income	953	904	904		
22	Aggregate Revenue Requirement from Retail Tariff	19002	21695	19664		

Notes:

- 1. * the amounts mentioned against MYT Order for these expenses are as approved in the Clarificatory Order dated August 24, 2007 in Case 26 of 2007 and Case 65 of 2006; the amount mentioned under 'Revised Estimate by MSEDCL' has been restated to account for the fact that both, costly and non-costly sources of power have been considered for determining the ARR
- 2. the power purchase expenses indicated under MYT Order refers to only non-costly sources of power, whereas the amounts mentioned in the other two columns include costly as well as non-costly power sources

Based on provisional truing up of various elements for FY 2007-08 as discussed in above paragraphs, the Aggregate Revenue Requirement for FY 2007-08 works out to Rs 19664 Crore as against the amount of Rs 19002 Crore approved in the MYT Order, after considering the costly as well as non-costly sources of power under the provisional truing up exercise. This increase in the Aggregate Revenue Requirement is primarily on account of the increase in the power purchase expenses and O&M expenses, which has been partly off-set by the lower long-term interest expenses allowed by the Commission, due to reasons explained in earlier paragraphs.

The Revenue Requirement for FY 2008-09, as shown below:

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Table: Aggregate Revenue Requirement for FY 2008-09 (Rs Crore)

		FY 20	08-09
Sl.	Particulars	Revised Estimate by MSEDCL	Approved
1	Power Purchase Expenses*	19743	19403
2	Operation & Maintenance Expenses		
2.1	Employee Expenses	1791	1874
2.2	Administration & General Expenses	235	181
2.3	Repair & Maintenance Expenses	481	456
3	Depreciation, including advance against depreciation	463	428
4	Interest on Long-term Loan Capital	679	347
5	Interest on Working Capital, consumer security deposits and Finance Charges	274	271
6	Provision for Bad Debts	269	335
7	Other Expenses	5	5
8	Income Tax	86	86
9	Intra-State Transmission Charges	1472	1786
11	Contribution to contingency reserves	63	29
13	Incentives/Discounts	79	79
14	Interest on Working Capital required on account of shortfall of Collection Efficiency	53	0
15	Total Revenue Expenditure	25692	25278
16	Return on Equity Capital	635	581
17	Aggregate Revenue Requirement	26327	25860
19	Less: Non Tariff Income	1074	1074
22	Aggregate Revenue Requirement from Retail Tariff	25253	24785

Note: * - Including costly as well as non-costly sources of power; also includes SLDC charges

The Aggregate Revenue Requirement for FY 2008-09 is lower than that projected by MSEDCL, mainly on account of the lower power purchase cost, and interest expenses approved by the Commission, which has been offset by the higher intra-State transmission charges payable on account of the revision in the ARR of the transmission licensees.

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5.21 Revenue from existing tariff for FY 2007-08 and FY 2008-09

In the APR Petition, MSEDCL has computed the revenue from existing tariffs for FY 2007-08, on the basis of the category-wise sales and the prevailing category-wise tariffs. MSEDCL estimated the revenue for FY 2007-08 as Rs. 18194 crore. For FY 2008-09, MSEDCL estimated the revenue from sale of electricity as Rs. 17143 crore, on the basis of the projected sales during this period and the prevailing category-wise tariffs. MSEDCL considered only the sales on account of non-costly power, while estimating the revenue from sale of power.

In order to have a realistic estimate of the actual sales and revenue during FY 2007-08, 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 over the period April 2007 to February 2008, which was submitted by MSEDCL. The Commission also asked MSEDCL to submit the data on actual subsidy billed to the State Government and subsidy received from the State Government. MSEDCL submitted that the total subsidy amount receivable from the State Government for FY 2007-08 was Rs. 1829 crore, of which around Rs. 1706 crore has already been received.

Based on the actual revenue earned by MSEDCL through sale of electricity over the period from April 2007 to February 2008, the Commission has proportionately considered the revenue as Rs. 17822 crore. Further, as in FY 2006-07, MSEDCL has also over-recovered ASC to the extent of around Rs. 1005 crore in FY 2007-08 (from April to December 2007, as per MSEDCL submission – yet to be vetted by the Commission), which has to be returned to the consumers on a one-to-one basis, after setting off the base energy charges as discussed earlier in this Order. The exact additional amount available to MSEDCL for setting off against the base ARR will be known only after MSEDCL undertakes the exercise of refund of excess ASC on one-to-one basis. For the purpose of this Order, while truing up the expenses and revenue for FY 2007-08, the Commission has estimated that the additional amount available to MSEDCL for setting off against the base ARR of FY 2007-08 is around Rs. 768 crore, which has been added to the revenue from sale of electricity. The same will be adjusted once the actual amounts are known, at the time of Annual Performance Review for FY 2008-09. The Commission has considered the State Government subsidy amount also, while considering the actual revenue from sale of electricity in FY 2007-08.

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Based on audited results submitted at the time of APR of FY 2008-09, the Commission will true up the actual expenses and revenue for FY 2007-08, subject to prudence check. The total revenue estimated by the Commission for FY 2007-08 is thus, Rs. 20419 crore.

For FY 2008-09, the Commission has estimated the revenue from sale of electricity on the basis of the revised sales projected by the Commission during this period and the prevailing category-wise tariffs, after considering both non-costly and costly power, since the ASC concept has been discontinued. The expected revenue from existing tariffs for FY 2008-09 works out to Rs. 22348 crore. This revenue includes the annual standby charges of Rs. 396 crore payable by Mumbai licensees, viz., REL, BEST and TPC, for the standby facility provided by MSEDCL. The difference between the revenue estimated by MSEDCL and that estimated by the Commission is primarily on account of the fact that MSEDCL has considered revenue from ASC charges, which are higher than the base energy charges, whereas the Commission has considered the revenue from the entire sales at the base tariffs.

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6 TARIFF PHILOSOPHY AND CATEGORY-WISE TARIFFS FOR FY 2008-09

6.1 Applicability of Revised Tariffs

The revised tariffs will be applicable from June 1, 2008 till March 31, 2009. In cases, where there is a billing cycle difference of 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 in actual revenue vis-à-vis the revenue requirement approved after truing up, due to the applicability of the revised tariffs for only ten months of FY 2008-09, will be trued up at the end of the year.

The Commission will undertake the Annual Review of MSEDCL's performance during the last quarter of FY 2008-09. MSEDCL is directed to submit its Petition for Annual Review of its performance during the first half of FY 2008-09, as well as truing up of revenue and expenses for FY 2007-08, with detailed reasons for deviation in performance, latest by November 30, 2008.

6.2 Consolidated Revenue Gap

In the APR Petition, MSEDCL submitted that the total revenue gap to be addressed through revision in tariffs in FY 2008-09 has the following components:

a) Revenue Gap of Rs. 782 crore for FY 2008-09, considering the projected ARR and projected revenue from existing tariffs.

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- b) Revenue Gap of Rs. 493 crore for FY 2007-08, after considering provisional truing up, considering the revised ARR and projected revenue from existing tariffs
- c) Revenue Gap of Rs. 968 crore for FY 2006-07, after the final truing up for FY 2006-07. Additional claim of Rs. 88 crore on account of the delayed implementation of the MYT Order, in accordance with the Judgment of the ATE in this matter. Total claims on this account thus, amount to Rs. 1056 crore.
- d) Pending claim of Rs. 11.6 crore on account of interest on delayed recovery of FAC for the months of July and August 2006. Regulatory Asset for FY 2001-02 of Rs. 539.4 crore, amounting to Rs. 1065 crore, after considering compound interest at the rate of 6% for six years.

The summary of the revenue gap and recovery mechanism proposed by MSEDCL in its APR Petition is given in the following Table:

Table: Revenue Gap projected by MSEDCL

(Rs. crore)

Sl.	Particulars	Amount			
1	Estimated Revenue Gap in FY 2008-09 at existing tariff	782			
2	Total Additional Claims				
3	Truing Up requirement for FY 2007-08	403			
4	Requirement on Account of Pending Claims	1077			
5	Total Revenue Shortfall to be bridged through FY 2008-09 tariff	3319			
	Total Percentage Increase in revenue required to mitigate total				
	shortfall	19.36%			

MSEDCL proposed to recover the total Revenue Gap of Rs 3319, which requires an average tariff increase of 19.36%, through revision of tariffs to different categories.

Based on its analysis, the revenue gap as estimated by the Commission for different years, and the computation of total revenue gap, is detailed below:

a) For FY 2001-02, the Commission has assessed a revenue surplus of Rs. 468.8 crore.

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- b) For FY 2006-07, the Commission has assessed a revenue surplus of Rs. 214 crore, based on the final truing up of expenses and revenue
- c) For FY 2007-08, the Commission has assessed a revenue surplus of Rs. 756 crore, based on the provisional truing up of expenses and revenue.
- d) For FY 2008-09, the Commission has assessed the revenue gap with existing tariffs as Rs. 2437 crore.
- e) The pending claim of Rs. 11.6 crore on account of interest on FAC has been allowed by the Commission.
- f) The Commission has not considered the revenue gap of Rs. 88 crore on account of the delayed implementation of the MYT Order, since the total actual revenue in FY 2007-08 has been considered for the provisional truing up, and hence, there is no need to add any under-recovery separately.
- g) The Commission, in line with its directions in the Order dated April 2, 2008 in Case Nos. 47 and 92 of 2007 on the Review Petition filed by MSEDCL on the issue of refund of Regulatory Liability Charges (RLC), has considered a refund of RLC of Rs. 500 crore in FY 2008-09 to be refunded to the specified consumer categories, out of the total amount of around Rs. 3227 crore collected by MSEDCL through RLC over the period from December 2003 to September 2006, which were like a loan given by these subsidizing categories to help MSEDCL tide over the financial crisis due to its heavy distribution losses. This is only a token amount, amounting to around 16% of the RLC collected from the selected consumer categories. It is expected that with progressive improvement of MSEDCL's operations in future years, the balance amount will be refunded in the near short-term. This refund amount of Rs. 500 crore has been added to the ARR of MSEDCL for FY 2008-09, and will thus be recovered from all the consumers of MSEDCL. The detailed methodology for refund of RLC is given in subsequent paragraphs under the Tariff Philosophy.

The summary of the revenue gap for FY 2008-09, as computed by the Commission, is given in the Table below:

Table: Total Revenue Gap to be recovered through tariff in FY 2008-09 (Rs. Crore)

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Particulars	MSEDCL	Commission
Truing up for FY 2001-02 - Regulatory Asset	1064.6	-468.82
Truing up for FY 2006-07	969	-214
Provisional Truing up for FY 2007-08	403	-756
Revenue Gap for FY 2008-09	782	2437
Additional claim due to ATE Order	88	0
Pending Claim - FAC interest	11.59	11.59
Total Revenue Gap to be recovered through tariffs in FY 2008-09	3318	1010
Average tariff increase	19.36%	4.52%
Additional revenue requirement due to refund of Regulatory Liability Charges		500
Effective Revenue Gap to be recovered through tariffs in FY 2008-09		1510
Average tariff increase		6.76%

The net revenue gap for FY 2008-09 thus works out to Rs. 1510 crore, as compared to MSEDCL's Petition for Rs. 3318 crore, resulting in an average increase in total revenue requirement by around 6.76%, as compared to MSEDCL's Petition for average tariff increase of 19.3%.

6.3 Tariff Philosophy

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, and also to consolidate the movement towards uniform tariff categorisation throughout the State of Maharashtra.

As explained earlier in the Order, while ruling on objections filed by certain stakeholders, the Commission has clarified 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, the Commission has observed that the tariff categorisation and applicability of tariffs is different across different licensees in the State, which is not appropriate. The differences exist because of historical reasons and differences in management policies and approach across licensees.

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However, within one State, the consumer categorisation and applicability of tariffs should not be significantly different, and the Commission has attempted to achieve this objective in this Order and other Orders for the distribution licensees in the State. 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.

The existing Fuel Adjustment Cost (FAC) Charge has been brought to zero, on account of the adoption of the existing fuel costs for projection of the fuel expenses. In case of any variation in the fuel prices with respect to these levels, 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. The FAC will be charged on a monthly basis, and the details of the computation and recovery from the same will have to be submitted to the Commission for post-facto, on a quarterly basis.

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.

The applicability of the BPL category tariffs has been modified slightly such that BPL category will be available only to such residential consumers who have a sanctioned load of upto and less than 0.1 kW, and have consumed less than 360 units per annum in the previous financial year. The eligibility criteria has thus, been modified from a monthly limit of 30 units to an annual limit of 360 units, so that it leaves some flexibility in consumption with the BPL consumer. 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

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than 360 units in the previous financial year, then the consumer will henceforth, be considered under the LT-1 residential category. Once a consumer is classified under the LT-1 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 years would be assessed on a pro-rata basis, i.e., 30 units per month. All the new consumers subsequently added in any month with consumption between 1 to 30 units (on pro rata basis 1 unit/day) in the first billing month will be considered in BPL Category The Commission has modified the applicability of tariff to telephone booths operated by handicapped persons and such booths will henceforth, be charged as per tariffs applicable to the LT-1 residential category.

The Commission has continued with the practice of charging higher tariffs for residential consumers having monthly consumption above 300 units per month and above 500 units per month, since, the Commission feels that in the residential category, such consumption should be classified as luxurious use, and an economic signal in terms of higher tariff has to be given to such consumers to encourage them to make efforts for energy conservation.

As the severe load shedding of 12 to 15 hours for agriculture category is likely to continue to prevail for some more time, the Commission has decided to retain the agriculture tariffs at the existing level. The tariff for HT Agriculture consumers has also been retained at the existing levels. MSEDCL should strive to ensure 100% metering of all consumption, including agricultural consumption, if not at the individual level, then at least at the feeder level and DTC level. In order to incentivise consumers to adopt metering, the metered tariffs have been specified lower than the effective flat rate tariffs. Further, when such metered consumers participate in DSM programmes, then all such consumers who shift to metered tariffs will be entitled to a rebate of 10% in the energy bills to be given by MSEDCL.

In view of the ATE's decision in this regard, the Commission has done away with LT-IX category, the separate consumer categorisation for shopping malls and multiplexes,. All these consumers will henceforth, be classified under LT-2 commercial category, as was being done earlier. Further, three new sub-categories have been created under LT-2 commercial category on the basis of sanctioned load, viz., 0 to 20 kW, 21 kW to 50 kW,

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and above 50 kW sanctioned load. The Commission has determined the tariffs for these two sub-categories at higher levels.

When the ASC was being charged earlier, a lower base energy charge was applicable for the HT Continuous industry as compared to HT non-continuous industry, which was offset by the higher ASC percentage charged to HT continuous industry. However, the ASC has now been removed. Since the continuous process industries are getting supply on a continuous basis, and are not subjected to load shedding, including staggering day, the tariff for HT continuous industry has been specified slightly higher than that applicable for HT non-continuous industry. Similarly, the tariff for HT IV – PWW consumers connected through express feeders has been specified slightly higher than that applicable for HT IV – PWW consumers getting supply through non-express feeders.

The Commission has created a new category, viz., HT-II Commercial, to cater to all commercial category consumers availing supply at HT voltages, and currently classified under the existing HT-I Industrial or LT-IX (multiplexes and shopping malls). This category will include Hospitals getting supply at HT voltages, irrespective of whether they are charitable, trust, Government owned and operated, etc. The tariff for such HT-II commercial category consumers has been determined higher than the tariff applicable for HT-I industrial, in line with the philosophy adopted for LT commercial consumers. Such categorisation already exists in other licence areas in the State, and is hence, being extended to MSEDCL licence area also.

The Commission has created a new category, viz., LT IX, which will include all crematoriums and cremation and burial grounds, irrespective of whether these are electric crematoriums, or otherwise, and the tariffs have been specified at lower levels. This is in line with the other distribution licensees in the State, where this category exists. However, this lower tariff 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.

The Commission has ensured that the average billing rate for HT Group Housing societies is lower than the average billing rate for LT residential category, since the Group Housing societies take supply at single point and supply it to the individual residences using their own network.

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MSEDCL had sought significant reduction in the tariffs applicable to LT and HT Public Water Works (PWW). The Commission has reduced the tariff for LT PWW by around 2.25% and by 8.5% for HT PWW consumers, since these are Public Utilities and benefit the society at large, while at the same time, the Commission cannot increase the cross-subsidy. If the State Government wishes to offer additional subsidy to this category, it may do so by compensating the MSEDCL for the resultant loss in revenue.

MSEDCL had proposed to reduce the tariff to MPECS by 50%. Keeping in view the fact that MPECS is an embedded distribution licensee within MSEDCL licence area, and has a predominantly agricultural mix of consumers, and is also subjected to load shedding in accordance with the prevailing load shedding protocol for that region, the Commission has reduced the tariff applicable to MPECS, though not to the extent proposed by MSEDCL. Further, in accordance with the Judgment of the Honourable Appellate Tribunal for Electricity (ATE) on the Appeal filed by MPECS against the Commission's Tariff Order for MPECS, the Commission rules that MSEDCL should install meters capable of recording the Simultaneous Maximum Demand (SMD) at all the energy interchange points with MPECS, and levy demand charges on MPECS on the basis of the recorded SMD, rather than on the arithmetic summation of the demand at all the 22 energy interchange points.

MSEDCL had proposed to introduce two new sub-categories within LT V industrial category, viz., (a) Power looms, and (b) Flour mills below 10 HP sanctioned load, and proposed a lower tariff for these two new sub-categories. The Commission has not created these two sub-categories, and has retained them under the LT V industrial category. However, the Commission has ensured that there is no tariff increase for the sub-category 0 to 20 kW, thereby protecting the smaller consumers from a tariff shock.

The Time of Day (ToD) tariffs will be applicable compulsorily to HT I Industry, HT II Commercial, HT IV Public Water Works, but excluding HT III Railways, HT V Agriculture, HT VI Group Housing Societies and HT VII Mula Pravara Electric Cooperative Society, which is a licensee. ToD tariffs will also be applicable to LT V industrial category above 20 kW sanctioned load, LT III Public Water Works and LT II consumer category above 20 kW sanctioned load, as well as optionally available to LT – V category consumers having sanctioned load upto 20 kW and LT II category consumers upto 20 kW sanctioned load, who have TOD meters. The TOD tariffs have been retained at existing levels.

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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 for HT category 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 recorded during the preceding eleven months, subject to the limit of Contract Demand;
- c) 50% of the Contract Demand.

Monthly Billing Demand for LT categories 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.

In line with the Commission's ruling in the MYT Order, since MSEDCL is yet to achieve 100% MD metering for LT V industrial consumers above 20 kW (around 97% completion has been indicated by MSEDCL till date), the MD tariffs for LT V industrial consumers will not be made effective. Till the MD meters are installed, MSEDCL will be allowed to charge only the earlier HP based tariffs, though the revenue has been assessed based on MD based tariffs.

The Commission reiterates that that HT-VI Residential would be applicable only to the Group Housing Societies. MSEDCL had been 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. MSEDCL is directed to ensure compliance with this directive immediately.

The rebates/incentives and disincentives have been retained at the existing levels.

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In line with the MYT Order, 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.

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 likely that the actual revenue earned by MSEDCL may be higher than that considered by the Commission, on account of tariff changes such as introduction of demand charges for LT commercial category, as well as creation of the new HT-II Commercial category. Any additional revenue/shortfall in revenue due to the impact not being assessed at this stage will be trued up at the time of final truing up for FY 2008-09.

The Commission approves MSEDCL's proposal for modification to the load shedding protocol, with the following basic changes, viz.,

- a) Introduction of two more Groups taking the number of Groups identified on the basis of distribution losses and collection efficiency, to six.
- b) Merger of the Categorisation of 'Urban and Industrial Agglomerations' and 'Other Regions'
- c) The revised groups and classifications, created on the basis of the distribution losses and collection efficiency are given below:

Group	Weighted average distribution loss and collection efficiency level (DCL 70/30)					
	Other Region Ag. dominated					
A	0% to 18%	0% to 21%				
В	>18% to 26%	>21% to 29%				
С	>26% to 34%	>29% to 37%				
D	>34% to 42%	>37% to 45%				
E	>42% to 50%	>45% to 53%				
F	Above 50%	Above 53%				

The approved ceiling hours of load shedding for different divisions grouped under the above load shedding matrix, for a demand-supply gap of around 4500 MW, are given below:

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Group	Other	Agriculture
	Regions	dominated regions
A	2.75	10.00
В	3.50	10.50
С	4.25	11.00
D	5.00	11.50
Е	5.75	12.00
F	6.50	12.00

The modification to the load shedding protocol is in public interest, as the remaining differentiation between urban and other regions has been eliminated, while at the same time, rewarding regions with lower distribution losses and higher collection efficiency, with reduced load shedding. The above load shedding matrix only indicates the ceiling hours of load shedding, and the actual number of hours of load shedding will depend on the demand-supply balance, and the timing of load shedding in different regions has to be formulated by MSEDCL, keeping in mind the local requirements. Moreover, due to the above changes, divisions that were hitherto performing well on the aspect of distribution loss and collection efficiency will have either the existing level of load shedding or benefit from reduced load shedding, despite the merger of Urban and Industrial Agglomerations with Other Regions.

MSEDCL should strive to reduce the load shedding to different regions and categories, by procuring the required quantum of power at reasonable rates through long-term power purchase agreements.

The computation of average cost of supply (CoS) is given below:

Table: Average Cost of Supply for FY 2008-09

Sl.	Particulars	Amount
1	Total Revenue Requirement (Rs. Crore)	23859
2	Total Sales (MU)	65966
3	Average Cost of Supply (Rs / kWh)	3.62

The existing cross-subsidy and the reduction in cross-subsidy considered by the Commission, is given in the Table below:

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	Average Cost of	Average Billing Rate (Rs./unit)		Ratio of A Billing I Average Supply	Rate to Cost of	% increase / decrease in Tariff	%
Category	Supply (Rs./unit)	Existing Tariff	Revised Tariff	Existing Tariff	Revised Tariff	w.r.t Avg.	increase in tariff (%)
g ;	(KS./uiiit)						` ′
LT I - Domestic		3.60	3.77	100%	104%	5%	1.8%
LT II - Non Domestic		5.40	6.27	149%	173%	24%	3.8%
LT III - Public Water Works		1.74	1.70	48%	47%	-1%	1.3%
LT IV - Agriculture	3.62	1.44	1.42	40%	39%	-1%	0.3%
LT V - LT Industrial		3.84	4.12	106%	114%	8%	-0.6%
LT-VI - Street Light		2.63	2.77	73%	77%	4%	0.2%
Temporary Connection		10.60	12.10	293%	335%	41%	0.7%
HT Category							
HT I-Continuous (Express							
Feeders)		3.70	4.61	102%	127%	25%	47.3%
HT I-Non Continuous (Non							
Express Feeders)		4.37	4.45	121%	123%	2%	-3.0%
HTII - Seasonal Category		5.54	5.59	153%	155%	2%	-8.7%
HT III Railways	2.62	4.15	4.70	115%	130%	15%	3.7%
HT IV- Public Water	3.62						
Works (PWW)		3.72	3.38	103%	94%	-9%	-6.2%
HTV - Agricultural		1.77	1.77	49%	49%	0%	0.0%
HT VI		3.35	3.74	93%	103%	11%	0.0%
Mula Pravara Electric Co-op							
Society (MPECS)		6.46	2.25	179%	62%	-116%	-13.6%

It should be noted that the above cross-reduction trajectory reduction does not factor in the refund of RLC that is being made to different consumer categories. More importantly, the above cross-reduction matrix does not reflect the levy of ASC that was being done under the existing tariff, and assumes that the entire consumption is being done at the base tariff. In reality, the bills of the consumer categories that were earlier liable to pay ASC, will reduce to the extent of no longer having to pay ASC rates on a certain proportion of their consumption. This would effectively mean that the bill would reduce to that extent, though the impact would vary from one consumer to another, depending on the percentage of consumption on which ASC was being levied. Further, due to the RLC refund being effected through this Order, the effective increase in the bills of the subsidising consumers would further reduce.

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6.4 Methodology for refund of RLC

The methodology of refund of Regulatory Liability Charges (RLC) was specified in the Order dated March 10, 2004 passed in Case No.2 of 2003 (in the matter of Determination of Tariff [2003-04] applicable to various categories of consumers of the Maharashtra State Electricity Board), wherein the concept of RLC was introduced. The above-said Order stipulates,

"33. The Regulatory Liability requirement is equal to the cost of the excess losses, i.e. the cost of additional power purchase required on account of the higher energy input requirement. The T & D loss level proposed by the MSEB for FY 2003-04 is 36.62%, as compared to the target of 26.87% set by the Commission. The balance losses of 9.75% equivalent to 6107 MU are thus excess losses vis-à-vis the targets.

34. The net cost of the excess energy input requirement is Rs.947 crore (6107 MU at an average rate of Rs. 1.55 per unit). Thus, there is a need to contribute Rs. 947 crore towards the Regulatory Liability over a period of one year. The average rate of contribution works out to 50 paise per unit for the subsidizing categories, viz. LT commercial, LTPG, HTP I, HTP II and Railways.

35. In future, when the T&D losses are reduced, then the RLC will be returned to these consumer categories through reduction in tariffs. The Commission clarifies that the contribution through RLC will not be recorded and maintained separately for each individual consumer and the category as a whole is expected to get the contribution back..." (emphasis added)

In the Commission's Clarificatory Order dated August 24, 2007 in Case No. 26 of 2007 and Case No. 65 of 2006, the Commission specified the method of refund of RLC as under:

"The total amount of RLC collected from the different consumer categories is given in the Table below:

(Rs. Crore)

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SI.	Category	Dec-03 to	01.04.04 to	01.04.05 to	06.06.05 to	01.04.06 to	Total
		31.03.04	31.03.05	05.06.05	31.03.06	30.09.06	
1	LT Commercial	23.93	91.52	18.03	80.91	54.95	269.34
2	Industrial L T	33.1	144.28	29.37	126.89	80.03	413.67
3	Industrial H T	378.85	680.39	160.76	685.81	494.41	2400.22
4	Railway Traction HT	11.75	52.05	10.57	43.15	26.72	144.24
	Total	447.63	968.24	218.73	936.76	656.11	3227.47

MSEDCL will refund the RLC in the following manner, so that the consumers get the refund regularly:

The refund is to be made to the category as a whole, and not to the respective consumer. Further, the refund has to be made in the same proportion as the contribution of RLC by the respective consumer category. The Commission has specified below, the amount of RLC refund in paise/kWh for the respective consumer category, to ensure ample clarity on the matter. Further, since the refund in paise/kWh has been computed on the basis of the annual sales projected for FY 2007-08, the actual amount of category-wise refund will have to be trued up at the end of the year, depending on the actual sales to the respective consumer category. The computations are shown below:

(Rs. Crore)

SI.	Category	Total	%	Share of	Share of	Monthly	Monthly
			Contribution	refund	refund	sales in	RLC Refund
				(Annual)	(monthly)	MU (Tariff	per unit
						Order)	billed
							(paise/kWh)
							[Sep 07 to
							March 08]
1	LT Commercial	269.34	8%	41.73	5.96	208.58	28.58
2	Industrial L T	413.67	13%	64.09	9.16	387.83	23.61
3	Industrial H T	2400.22	74%	371.84	53.12	1907.67	27.85
4	Railway Traction HT	144.24	4%	22.35	3.19	102.08	31.27
	Total	3227.47	100%	500.00	71.43	2606.17	27.41

Notes:

1. The refund has to be made in the balance seven month period from September 1, 2007 to March 31, 2008

Since MSEDCL has not refunded the RLC for the bills issued till date during the period May 2007 to August 2007, the Commission has determined the monthly RLC refund in such a manner that the entire refund of Rs. 500 crores occurs over the balance sevenmonths of the year, as computed above. This will also enable MSEDCL to overcome any

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liquidity constraints, which could occur if MSEDCL were directed to combine the refund of past three months with that due in August 2007, and give the balance refund thereafter."

MSEDCL filed a Review Petition against this ruling of the Commission in the Clarificatory Order. In the Commission's Order in Case Nos. 47 of 2007 and 92 of 2007 dated April 2, 2008, on the Review Petition filed by MSEDCL against the Commission's Clarificatory Order dated August 24, 2007 in Case No. 26 of 2007 and Case No. 65 of 2006, the Commission inter-alia ruled as under,

"(7)... Consequently, the net result is that the Review Petition is allowed and the RLC amounts that are required to be returned would be effected by reduction in tariffs of the subsidized consumer categories that had contributed the RLC while at the same time MSEDCL is permitted to claim these amounts as expenses in its ARR so that all consumers equally bear the RLC. Since the Orders dated August 24, 2007 and May 18, 2007 have not been implemented by MSEDCL as regards RLC refund, and the period stipulated (September 2007 to March 2008) in the said Orders have lapsed, there is no other way but to effect reduction of tariff of the contributing subsidising categories in the forthcoming Annual Performance Review (APR) and tariff proceedings in Case No. 72 of 2007 and in subsequent tariff proceedings. The total amount, which will be returned to the contributing subsidising categories by tariff mechanism, will be included as an expense in the revenue requirement of MSEDCL. This will ensure that the long-pending refund of RLC is effected in reality. The above would be in consonance with the stated position in the minutes of the Technical Validation Session dated January 3, 2008 in Case No. 72 of 2007 that "MSEDCL should propose RLC refund in FY 2008-09, so that entire liability of Rs. 3225 crore may be liquidated over a period of time. The Commission also clarified that MSEDCL may include the amount of RLC refund under the ARR as it would do for any other loan refund." This is after taking into consideration the fact that unless the RLC amounts, which are required to be refunded, are treated as expenses in MSEDCL's ARR, the same would in effect and reality be never refunded.

Also, it is not possible to consider the reduction in tariff in order to refund the RLC to be linked directly to the reduction in losses as compared to the target set by the Commission, because in order to refund any amount, the tariffs will have to

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be determined considering the losses at a higher level than the actual losses, to ensure that MSEDCL has surplus funds due to efficiency gains, which could then be used to refund the RLC. The straightforward method to balance the interests of MSEDCL as well as the contributing consumer categories would be to include this amount of RLC refund as an expense in the ARR, so that it is shared by all consumers. In view of the above observations and directions, no interest would be payable by MSEDCL to the contributing subsidising categories, with regard to the amount of RLC not refunded till date."

During the public process on the APR Petition filed by MSEDCL, there were requests that the refund of RLC should be undertaken on a one-to-one basis, rather than to the category as a whole.

The Commission has reconsidered its views in this regard. Though the Order dated Mach 10, 2004, states that RLC collected by MSEDCL will be refund to the category as a whole, and not to the individual consumer, the Commission is now of the view that it would best serve the interests of justice, if the refund of the RLC collected by MSEDCL is undertaken on a one-to-one basis. The reasons for the same are as given below:

- a) The Commission understands that MSEDCL has maintained a record of individual consumer-wise RLC paid, though it was not required to do so
- b) The RLC, when introduced, was intended to be levied only for a period of one year, but due to the fact that no ARR and Tariff Petition was filed for a long time by MSEB/MSEDCL, the levy of RLC continued for a period of around 2.75 years, from December 1, 2003 to September 30, 2006
- c) Even after this period, MSEDCL has not refunded the RLC collected from the consumers, citing lack of liquidity and inadequate performance improvement. Consequently, it is now around four and a half years, since the levy of RLC commenced.
- d) During this period, several new consumers would have been added to MSEDCL's consumer base, who would either have contributed RLC for a period lower than 2.75 years or may not have contributed at all, since they would have been consumers for only part of this period
- e) If MSEDCL were to refund the RLC to the category as a whole, rather than on a one-to-one basis, it would result in a situation wherein consumers who have contributed to RLC would get lower than what they have actually contributed, because consumers who have not contributed at all or who have contributed

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- lower amounts, would also be eligible to the same amount as refund. This would be against natural justice
- f) By ordering that the refund of RLC be done on a one-to-one basis, the Commission is of the view that on the one hand, consumers who have contributed to RLC would get refund in the same proportion as their contribution, while consumers who have not contributed to RLC, would not be eligible for any refund. This would be a very just solution and would not adversely affect any consumer.

In view of the above observations, the Commission rules that 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.
- b) Since Rs. 500 crore is to be refunded out of the total RLC collection of Rs. 3227 crore, the refund in FY 2008-09 will be in the same proportion of the contribution by that consumer. The percentage of refund works out to 15.5%. 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.
- c) Since the effective billing period remaining in FY 2008-09 is nine months from July 2008 to March 2009 (considering that MSEDCL will have to incorporate this methodology into the billing software), MSEDCL should ensure that the entire refund of Rs. 500 crore is undertaken in the balance nine months, by ensuring proportionate refund.
- d) MSEDCL should ensure that the RLC is refunded in the time-frame provided by the Commission, given that the amount is being recovered through the base ARR from all the consumers. In case MSEDCL delays the refund beyond the billing month of July 2008, then MSEDCL will be liable to pay interest at the rate of 6% per annum to the consumers on the amount of refund due to them,

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for the period of delay. This interest paid, if any, will not be recoverable from the ARR.

6.5 Revised Tariffs with effect from June 1, 2008

Consumer Category	Fixed/Demand Charge	Energy
	(Rs/KVA/month) or(Rs/HP/month) or (Rs/	Charge
	connection/month)	(Paise/kWh)
LT I - Domestic		
Consumption less than 30	Rs 3 per service connection	40
Units Per Month (BPL)		
Consumption more than		
30 Units Per Month		
0-100 Units	Single Phase: Rs. 30 per service connection;	205
101-300 Units	Three Phase: Rs. 100 per service connection;	390
301-500 Units	Additional Fixed charge of Rs. 100 per 10 kW load	530
Above 500 units (Only	or part thereof above 10 kW load shall be payable.	620
balance Units)		
LT II - Non Domestic		
0-20 kW		
0 to 200 units per month	Rs. 150 per connection per month	340
Above 200 units per	Rs. 150 per connection per month	525
month (only balance		
consumption)		
>20 and ≤ 50 kW	Rs. 150 per kVA per month	550
> 50 kW	Rs. 150 per kVA per month	750
LT III - Public Water W	orks	
0- 20 KW	Rs 40 per kVA per month	125
>20-40 KW	Rs 50 per kVA per month	175
>40-50 KW	Rs 70 per kVA per month	250
LT IV - Agriculture		
Un-metered Tariff		
Category 1 Zones*	Rs. 241 per kW per month	0

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Consumer Category	Fixed/Demand Charge	Energy
	(Rs/KVA/month) or(Rs/HP/month) or (Rs/	Charge
	connection/month)	(Paise/kWh)
	(Rs 180 per HP per month)	
Category 2 Zones#	Rs 201 per kW per month	0
	(Rs. 150 per HP per month)	
Metered Tariff (including	Rs 20 per kW per month	110
Poultry Farms)	(Rs 15 per HP per month)	
LT V - Industrial		
0-20 kW (upto and	Rs. 150 per connection per month	300
including 27 HP)	-	
Above 20 kW (above 27	Rs. 100 per kVA per month for 65% of maximum	450
HP)	demand or 40% of contract demand, whichever is	
	higher	
	Rs. 60 per HP per month for 50% of sanctioned	
	load, till such time MD meters are installed for all	
	consumers	
LT VI - Street Light		
Grampanchayat, A, B &	Rs 30 per KW per month	240
C Class Municipal		
Council		
Municipal Corporation		290
Areas		
LT VII - Temporary		
Temporary Connections	Rs 250 per connection per month	1200
-Other Purpose		
Temporary Connections -	Rs 200 per connection per occasion of supply	200
Religious		
LTVIII - Advertisement	Rs 400 per connection	1400
& Hoardings		
LT IX – Crematoriums	Rs 200 per connection per month	200
& Burial Grounds		
TOD Tariff (in addition	to base tariff, after installation of MD meter)	compulsorily

applicable for LT II above 20 kW, LT III and LT V above 20 kW, as well as optionally

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Consumer Category		Energy Charge (Paise/kWh)	
available to LT II category upto 20 kW and LT V upto 20 kW			
0600 hrs – 0900 hrs		0	
0900 hrs – 1200 hrs		80	
1200 hrs – 1800 hrs		0	
1800 hrs – 2200 hrs		110	
2200 hrs – 0600 hrs		(85)	

*Ca	*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. FAC will be determined every month based on the FAC Formula approved by the Commission.
- 2. Billing Demand for LT II categories, LT III and LT V category having MD based tariff:

Monthly Billing Demand will be the higher of the following:

- c) 65% of the Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
- d) 40% of the Contract Demand

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Table 5: Summary of HT Tariff Effective from June 1, 2008

Consumer Category	Demand Charges	Energy Charge
	(Rs/kVA/month)	(Paise/kWh)
HT I - Industry		
Continuous Industry (on express	150	430
feeder)		
Non-continuous Industry (not on	150	395
express feeder)		
Seasonal Industry	150	500
HT II - Commercial	150	700
HT – III - Railway Traction	0	470
HT IV - Public Water Works		
Express Feeders	150	310
Non- Express Feeders	150	300
HT V- Agriculture	25	160
HT- VI		
Group Housing Society	125	300
Commercial Complex	125	525
HT VII - Mula Pravara	100	200
Electric Co-op Society		
TOD Tariff (in addition to base ta	riff) - for HT I, HT II &	HT IV
0600 hrs – 0900 hrs		0
0900 hrs – 1200 hrs		80
1200 hrs – 1800 hrs		0
1800 hrs – 2200 hrs		110
2200 hrs – 0600 hrs		(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>HT Industries, HT Commercial & HT Water Works (HT I, HT II and HT IV)</u> Monthly Billing Demand will be the higher of the following:

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- vii. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
- viii. 75% of the highest billing demand recorded during the preceding eleven months, subject to the limit of Contract Demand
- ix. 50% of the Contract Demand.
- 4. 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
- 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.

Incentives and Disincentives:

Power Factor Calculation

Wherever, the average power factor measurement is not possible through already installed meter, the following method for calculating the average power factor during the billing period shall be adopted-

Average Power Factor
$$= \frac{Total(kWH)}{Total(kVAh)}$$

Wherein the kVAh is the square root of the summation of the squares of kWh and RkVAh

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<u>Power Factor Incentive</u> (Applicable for HT I, HT II, HT IV, and LT II above 20 kW, LT III and LT V above 20 kW)

Whenever the average power factor is more than 0.95, an incentive shall be given at the rate of 1% (one percent) of the amount of the monthly bill including energy charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties for every 1% (one percent) improvement in the power factor (PF) above 0.95. For PF of 0.99, the effective incentive will amount to 5% (five percent) reduction in the monthly bill and for unity PF, the effective incentive will amount to 7% (seven percent) reduction in the monthly bill.

<u>Power Factor Penalty</u> (Applicable for HT I, HT II, HT IV, and LT II above 20 kW, LT III and LT V above 20 kW)

Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of 2% (two percent) of the amount of the monthly bill including energy charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties for the first 1% (one percent) fall in the power factor below 0.9, beyond which the penal charges shall be levied at the rate of 1% (one percent) for each percentage point fall in the PF below 0.89.

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-

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Sr.		Interest Rate
No.	Delay in Payment (months)	p.a.
110.		(%)
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

The Commission has retained the Load factor incentive for consumers having Load Factor above 75% based on contract demand. 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 category only. Further, the load factor rebate will be available only if the consumer has no arrears with the MSEDCL, and payment is made within seven days from the date of the bill or within 5 days of the receipt of the bill, whichever is later. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by the MSEDCL, and the same is being made as scheduled. The 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:

Load Factor = Consumption during the month in MU

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

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the penal charges for exceeding the contract demand and has to pay the applicable penal charges).

The detailed approved Tariff Schedule is given as **Appendix 1** to this Order.

6.6 Wheeling Charges and Loss Compensation

WHEELING CHARGES

The Commission, in the MYT Order, approved the wheeling charges and wheeling losses for FY 2007-08 as under:

Item Description	Approved for FY 2007-08 as per MYT Order		
	Wheeling Charge	Wheeling Loss (%)	
	(Rs/kW/month)		
33 kV	38	6%	
22 kV / 11 kV	245	9%	
LT level	Not specified	Not specified	

In the MYT Order, the Commission observed that separate accounting of network related costs and supply related costs is essential for unbundling of cost and tariff components, and forms pre-requisite for appropriate determination of wheeling charges, which affects open access transactions as mandated under Electricity Act 2003. Further, network costs need to be segregated in terms of voltage levels (33 kV, 22 kV/11 kV, and LT). The Commission had directed MSEDCL to submit voltage-wise segregated ARR for the Wires Business at the time of 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 during APR for FY 2007-08.

However, MSEDCL has not maintained network related and supply related costs separately. MSEDCL, in 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

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of GFA and costs. The value of assets considered here is as per the opening gross block at the beginning of the year. MSEDCL emphasized that this Allocation Statement and Voltage-wise asset base is based only on engineering estimates, as accurate audited data for the same are not available. Opening GFA of MSEDCL for FY 2008-09 of Rs 13,590 Crore has been segregated across various voltage levels as under –

- § 33 kV 14%;
- § 22 kV/11 kV 56%; and
- § LT level 30%.

Based on the Contract Demand at various voltage levels, MSEDCL projected the wheeling charges and wheeling losses as under:

Item Description	MSEDCL Projection for FY 2008-09	
	Wheeling Charge	Wheeling Loss (%)
	(Rs/kW/month)	
33 kV	269	6%
22 kV / 11 kV	316	9%
LT level	29	26.5%

In the absence of accounting information for wire related costs, the Commission has considered allocation of various cost components of ARR between network related costs and supply related costs, in line with the principles outlined in the MYT Order. Accordingly, approved network related annual revenue requirement for MSEDCL for FY 2008-09 amounts to Rs 1831.79 Crore. The Commission directs MSEDCL to maintain the accounts for expenses incurred on wires business and supply business separately, and submit the same during Annual Performance Review for FY 2008-09.

The Commission has determined the wheeling charges for 33 kV, 22 kV/11 kV and LT level based on the allocation of asset base considering sales at respective voltage levels. The costs at higher (33 kV) voltage level are also apportioned to lower voltage (22 kV/11 kV and LT) 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

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levels, and the wire costs at higher voltage levels has further been 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 on the various voltage levels on the distribution network during FY 2008-09 is summarized in the following Table:

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 26.5% which includes commercial loss component as well. The Commission hence, rules that the wheeling loss applicable for open access transactions entailing drawal at 33 kV level is 6%, for drawal at 22 kV or 11 kV level is 9%, and for drawal at LT level wheeling loss applicable shall be 14%, equivalent to estimated technical loss at LT level.

Accordingly, Approved Wheeling Charges and Wheeling loss at HT and LT level for FY 2008-09 is summarised in the following Table:

Item Description	Approved for FY 2008-09	
	Wheeling Charge	Wheeling Loss (%)
	(Rs/kW/month)	
33 kV	20	6%
22 kV / 11 kV	110	9%
LT level	191	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 in the MYT Order (Case

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65 of 2006) and further elaborated vide Commission's Order dated November 20, 2007 (Case 33 of 2007) shall continue to be applicable under this Order for Wheeling Charges as approved for FY 2008-09.

6.7 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.

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7 APPLICABILITY OF ORDER

This Order for FY 2008-09 shall come into force with effect from June 1, 2008, and shall continue to be in force till March 31, 2009.

The Commission will undertake the Annual Review of MSEDCL's performance during the last quarter of FY 2008-09. MSEDCL is directed to submit its Petition for Annual Review of its performance during the first half of FY 2008-09, as well as truing up of revenue and expenses for FY 2007-08, with detailed reasons for deviation in performance, latest by November 30, 2008.

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

The Commission would also like to put on record, the efforts of its advisors, M/s ABPS Infrastructure Advisory Private Limited.

Sd/(S. B. Kulkarni)
Member

Sd/
(A. Velayutham)

Member

Sd/(P B Patil)
Secretary, MERC

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APPENDIX 1

Approved Tariff Schedule for MSEDCL, with effect from June 1, 2008-06-20

Annexed as a separate File

APPENDIX 2

List of persons who attended the Technical Validation Session held on February 25, 2008

Annexed as a separate File

APPENDIX 3

List of Objectors

Annexed as a separate File

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