

**Before the**  
**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**  
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**Case No. 19 of 2012**

**In the matter of Petition of Maharashtra State Electricity Distribution Company  
Limited seeking Final True up for FY 2010-11,  
Aggregate Revenue Requirement of FY 2011-12 and FY 2012-13, Tariff Determination  
for FY 2012-13 and Revision in Schedule of Charges**

**Shri V. P. Raja, Chairman**  
**Shri Vijay L. Sonavane, Member**

Maharashtra State Electricity Distribution Company Limited.....Petitioner

**ORDER**

**Dated: 16 August, 2012**

In accordance with the MERC (Terms and Conditions of Tariff) Regulations, 2005, and upon directions from the Maharashtra Electricity Regulatory Commission (MERC or the Commission), Maharashtra State Electricity Distribution Company Limited (MSEDCL), submitted its Petition for Final True up for FY 2010-11, Aggregate Revenue Requirement of FY 2011-12 and FY 2012-13, Tariff Determination for FY 2012-13 and Revision in Schedule of Charges. This Petition was numbered as Case No. 19 of 2012.

*“1. To admit the Petition seeking Final True up of FY 2010-11 and Annual Revenue Requirement for FY 2011-12 and FY 2012-13 as per the provisions of MERC (Terms and Conditions of Tariff) Regulations, 2005;*

*2. To approve the total recovery of Final True up of FY 2010-11 and Annual Revenue Requirement for FY 2011-12 and FY 2012-13 and other claims as proposed by MSEDCL.*

*3. To allow to recover the additional charges in case of any variation in the fixed cost of the Central Government Power Station as approved by CERC in line with the CERC (Terms & Conditions of Tariff) Regulations, 2009-14.*

*4. To approve revision in tariff as proposed by MSEDCL for different categories of consumers.*

*5. To restore fixed charges for all consumers belonging to HT category, except HT II Commercial, as per Tariff Order dated 20th October 2006 and rationalise fixed charges as proposed and may please consider deciding a road map to gradually*

increase the fixed charges to ensure that the fixed expenditure is fully recovered through fixed charges. For HT II Commercial Category (Others), it is proposed to increase the fixed charges from Rs. 150 per kVA to Rs. 300 per kVA per month.

6. To approve the increase in the fixed charges of BPL Category from Rs. 3 per connection per month to Rs. 10 per connection per month, Domestic Consumers (0 - 300 Units) from Rs. 30 to Rs. 60 per connection per month, Domestic Consumers (300-500 Units) from Rs. 30 to Rs. 90 per connection per month, Domestic Consumers (500-1000 Units) from Rs. 30 to Rs. 120 per connection per month.

7. To approve the increase in the fixed charges of LT Commercial Consumers (Above 20 kW) from Rs. 150 per kVA per month to Rs. 300 per kVA per month.

8. To approve the increase in the fixed charges of LT Industrial Consumers Upto 20 kW from Rs. 150 to Rs. 220 per connection per month and Above 20 kW From Rs. 100 to Rs. 200 per kVA per month.

9. To approve the increase in the ToD rebate as applicable to Industrial Consumers (HT and LT) from existing level of 85 paise per unit to 250 paise per unit applicable for consumption during night hours (10.00 p.m. to 06.00 a.m. next day).

10. To Permit recovery of 50% of the actual capital expenditure that would be incurred for executing the work of shifting of electric poles / lines presently causing obstacle to vehicular tariff in the city of Nagpur from the consumers situated within geographical jurisdiction of Nagpur Municipal Corporation, i. e. the consumers from the O & M Divisions of MSEDCL at Mahal, Gandhibaug, Congress Nagar & Civil Lines under Nagpur Urban Circle at the rate of 29 paise per unit over a period of twelve (12) months by way of "Infrastructure Charge";

11. To Permit to follow similar policy in other areas also wherever the Local Body and / or the consumers request MSEDCL for shifting of electric poles and conversion of Low Tension / High Tension Overhead Distribution Network into Underground, for the purposes other than System Improvement, Reduction in Losses etc..

12. To approve cross subsidy surcharge and all such other charges including Wheeling Charges and Losses in relation with Open Access granted to consumers in accordance with the provisions of the EA 2003 for the year 2012-13 based on the correct level of cross subsidy for FY 2012-13.

13. To impose minimum 25% limit for change in Contract Demand for the applicability of the current provisions regarding Billing Demand and make amendment in the current provision as proposed by MSEDCL.

14. To modify the present provision in respect of "Billing Demand" and the Demand recorded during off peak hours to be considered for billing purpose.

15. To approve revision regarding load factor incentive for such consumers who exceed contract demand during night hours.

16. *To approve the proposed energy charge payable by domestic consumers in the tariff slab of 0 to 100 units per month.*
17. *To allow to introduce a new consumer sub-category within Low / High Tension non-domestic (Commercial) category as Government owned, managed and operated educational institutions including higher educational institutes (viz., Zilla Parishad/Municipal Council or Corporation Schools, Govt. Medical/Engineering Colleges etc.) but excluding Government aided educational institutes. Similarly, the said sub-categories is proposed to also include Government owned, managed and operated hospitals (viz., District Civil Hospitals, Primary Health Centre etc.).*
18. *To allow to introduce new tariff slabs in LT non-domestic consumer sub-category (0-20 kW) as (i) 0 to 200 units, (ii) 200 to 500 units, and (iii) above 500 units.*
19. *To remove ceiling of 10% on levy of FAC.*
20. *To approve the revised applicability of tariff as proposed by MSEDCL.*
21. *To grant any other relief as the Hon'ble Commission may consider appropriate.*
22. *To approve the Schedule of Charges (Part A & Part B) as proposed by MSEDCL.*
23. *To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.*
24. *To condone any error/omission and to give opportunity to rectify the same.*
25. *To permit the Petitioner to make further submissions, addition and alteration to this Petition as may be necessary from time to time."*

The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after taking into consideration submissions made by MSEDCL, suggestions and objections of the public, and responses of MSEDCL thereto, issues raised during the Public Hearing, and all other relevant material, hereby conducts the final True Up for FY 2010-11, and determines the Aggregate Revenue Requirement of FY 2011-12 and FY 2012-13 and Tariff for FY 2012-13.

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## List of Abbreviations

**Table 1: Abbreviations**

Abbreviation	Expansion
AAD	Advance Against Depreciation
A&G	Administration and General
APDRP	Accelerated Power Development and Reforms Programme
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
AS	Accounting Standard
ASC	Additional Supply Charge
ATE	Appellate Tribunal for Electricity
BEST	Brihan-Mumbai 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
COD	Commercial Operation Date
COS	Cost of Supply
COSIA	Chamber of Small Industries Association
CPI	Consumer Price Index
CPP	Captive Power Plant
Commission/MERC	Maharashtra Electricity Regulatory Commission
DA	Dearness Allowance
DSM	Demand Side Management
DTA	Deferred Tax Asset
DTL	Deferred Tax Liability
EA2003/Act	Electricity Act, 2003
ESO	Energy Sent Out
FAC	Fuel Adjustment Cost
FY	Financial Year
GFA	Gross Fixed Assets
GoM	Government of Maharashtra
HT	High Tension
HVDS	High Voltage Distribution System
IDC	Interest During Construction
InSTS	Intra-State Transmission System
kVA	Kilo-Volt Ampere
kW	Kilo Watt
kWh	Kilo Watt Hour / Unit
LT	Low Tension
MPECS	Mula Pravara Electric Cooperative Society Limited
MSEB	Maharashtra State Electricity Board
MSEDCL	Maharashtra State Electricity Distribution Company Ltd.
MSETCL	Maharashtra State Electricity Transmission Company Ltd.



<b>Abbreviation</b>	<b>Expansion</b>
MSLDC	Maharashtra State Load Despatch Centre
MSPGCL	Maharashtra State Power Generation Company Limited
MU	Million Units
MGP	Mumbai Grahak Panchayat
MYT	Multi Year Tariff
NCE	Non Conventional Energy
NTPC	National Thermal Power Corporation Limited
O&M	Operation and Maintenance
PF	Power Factor
PGCIL	Power Grid Corporation of India Limited
PPA	Power Purchase Agreement
PWW	Public Water Works
RBI	Reserve Bank of India
RInfra	Reliance Infrastructure 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 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
TPC	The Tata Power Company Ltd.
TTSC	Total Transmission System Cost
TVS	Technical Validation Session
TSSIA	Thane Small Scale Industries Association
UI	Unscheduled Interchange
VIA	Vidharba Industries Association
VRS	Voluntary Retirement Scheme
WPI	Wholesale Price Index
WRPC	Western Region Power Committee
ZLS	Zero Load Shedding

## 1. BACKGROUND AND SALIENT FEATURES OF THE ORDER

### 1.1 Background

- 1.1.1 The Petitioner, MSEDCL, is a Company formed under the Government Resolution No. ELA-1003/P.K.8588/Bhag-2/Urja-5 dated 24 January, 2005, of the Government of Maharashtra, with effect from 6 June, 2005 according to the provisions envisaged in Part XIII of the Electricity Act, 2003. The provisional Transfer Scheme was notified under Section 131(5)(g) of the EA 2003 on 6 June, 2005, which resulted in the creation of the following four successor Companies and MSEB Residual Company, from the erstwhile Maharashtra State Electricity Board (MSEB), namely,
- a) MSEB Holding Company Limited;
  - b) Maharashtra State Power Generation Company Limited (MSPGCL);
  - c) Maharashtra State Electricity Transmission Company Limited (MSETCL);  
and
  - d) Maharashtra State Electricity Distribution Company Limited (MSEDCL).
- 1.1.2 The present Petition has been filed by MSEDCL in connection with its business of distribution and supply of electricity in the entire State of Maharashtra except areas of Mumbai where electricity is supplied by Brihan-Mumbai Electric Supply & Transport Undertaking (BEST), Reliance Infrastructure Limited (RInfra), and Tata Power Company Limited (TPC).
- 1.1.3 The present Petition has been filed by MSEDCL seeking approval of Truing up for FY 2010-11, determination of ARR of FY 2011-12 and FY 2012-13, determination of Tariff for FY 2012-13, and revision in schedule of charges. The Petition has been filed under the MERC (Terms and Conditions of Tariff) Regulations, 2005 (hereinafter referred to as "Tariff Regulations, 2005"). The background leading to the filing of the present Petition is discussed in the following paragraphs.
- 1.1.4 ***Petition for Truing up for FY 2008-09, Annual Performance Review for FY 2009-10 and Tariff determination for FY 2010-11 (Case No. 111 of 2009):*** MSEDCL submitted its Petition for Truing up for FY 2008-09, Annual Performance Review for FY 2009-10 and Tariff determination for FY 2010-11 on 18 February, 2010. The Commission issued the Order on the above on 12 September, 2010, which came into effect on 1 September, 2010. The consolidated revenue gap for FY 2010-11 estimated by the Commission was Rs. 909 crore against Rs. 4166 crore projected by MSEDCL in its Petition.
- 1.1.5 ***Petition for review of the Order dated 12 September, 2010 in Case No. 111 of 2009 in respect of MSEDCL's Annual Performance Review for FY 2009-10, True up for FY 2008-09 and ARR and Tariff Determination for FY 2010-11 (Case No. 69 of 2010):*** MSEDCL submitted a Petition for review of the Order dated 12 September, 2010 in Case No. 111 of 2009. The Commission, vide Order dated 2 December, 2010 approved additional revenue of Rs. 1136.27 crore in this Review Order, which was to be recovered as Additional Energy Charge from consumers. This Order came into force from 1 September, 2010. However, the recovery of additional revenue from consumers commenced from 1 December, 2010.

- 1.1.6 **Multi Year Tariff (MYT) Regulations, 2011:** On 4 February, 2011, the Commission notified the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2011 (hereinafter referred to as the “MYT Regulations, 2011”). These Regulations were to be applicable for determination of Tariff from 1 April, 2011 and onwards up to FY 2015-16 for all existing and future Generating Companies, Transmission Licensees and Distribution Licensees in the State of Maharashtra.
- 1.1.7 **Exemption from MYT Regulations, 2011 (Case No. 24 of 2011):** MSEDCL submitted a Petition on February 22, 2011 under Section 94 (2) of the EA 2003 and Regulation 85 (a) of the MERC (Conduct of Business) Regulations, 2004, Regulation 4.1 and Regulations 99 and 100 of the MYT Regulations, 2011 seeking exemption from the determination of Tariffs under MYT Regulations, 2011. On this Petition filed by MSEDCL, an exemption was granted to MSEDCL, under Regulation 4.1 of the MYT Regulations, 2011, vide the Commission’s Order dated 23 August, 2011 in Case No. 24 of 2011, for two years (till 31 March, 2013) from the determination of Tariff under the MYT Regulations, 2011. Furthermore, an amendment to the MYT Regulations, 2011 was notified on 21 October, 2011, in which the distribution licensees who have been exempted for certain periods from the determination of Tariff under the MYT Regulations, 2011, were permitted to continue to file ARR and Tariff applications under the Tariff Regulations, 2005.
- 1.1.8 Regulation 101.2 of the MYT Regulations, 2011 specifies, “..... *any proceedings before the Commission pertaining to the period till FY 2011, including Review Petitions, shall be governed by MERC (Terms and Conditions of Tariff) Regulations, 2005*”. Therefore, for the present Petition filed by MSEDCL for the years till FY 2012-13, (i.e., FY 2010-11, FY 2011-12 and FY 2012-13), the Tariff Regulations, 2005 are applicable.
- 1.1.9 **Petition for Final True up for FY 2009 – 10, Provisional True up for FY 2010 - 11 and Annual Performance Review for FY 2010 -11 (Case No. 100 of 2011):** On 23 August, 2011, the Commission, during the proceedings of Case No. 24 of 2011, directed MSEDCL to file its Petition for Final True up for FY 2009 – 10, Provisional True up for FY 2010 -11 and Annual Performance Review for FY 2010 -11. MSEDCL submitted its Petition (numbered as Case 100 of 2011), on 12 July, 2011. Meanwhile, MSEDCL requested an interim relief in September 2011. On 31 October, 2011, the Commission through interim Order in Case No. 100 of 2011, MA No. 4 of 2011 and Case No. 143 of 2011 approved an amount of Rs. 3,265 crore as part relief with respect to Case No. 100 of 2011. This amount was to be recovered through Tariff through an Additional Energy Charge. The Commission, further, recognised a revenue gap of Rs. 405 crore, through Order dated 30 December, 2011.
- 1.1.10 **Petition for Final True up for FY 2010-11, Aggregate Revenue Requirement of FY 2011-12 and FY 2012-13, Tariff Determination for FY 2012-13 and Revision in Schedule of Charges. (Case No. 19 of 2012):** On 24 February, 2012, MSEDCL filed its Petition for Final True up for FY 2010-11, Aggregate Revenue Requirement of FY 2011-12 and FY 2012-13 and Tariff Determination for FY 2012-13. The ARR and the revenue gap as estimated by MSEDCL in its Petition dated 24 February, 2012 is as below:

**Table 2: Revenue gap estimated by MSEDCL**

<b>Sr. No..</b>	<b>Particular</b>	<b>Rs. crore</b>	<b>% increase in Tariff</b>
1	Gap of FY 2010-11	(428)	-1%
2	Gap of FY 2011-12	1,793	4%
3	Gap of FY 2012-13	2,344	5%
4	Capital expenditure of FY 2008-09 (deferred by the Commission due to non-submission of information in Case No. 111 of 2009)	237	1%
5	Gap approved to be uncovered for FY 2010-11 (approved in Case No. 100 of 2011)	405	1%
6	ATE Judgement (124 of 2010): surplus allowed in the provisional True up for the FY 2008-09	427	1%
7	Approved gap of MSPGCL (approved in Case No. 107 of 2011)	610	1%
8	Approved gap of MSETCL (approved in Case No. 102 of 2011)	230	1%
<b>9</b>	<b>Total gap to be recovered from Tariff</b>	<b>5,619</b>	<b>13%</b>

## 1.2 Technical Validation Session (TVS)

1.2.1 The Commission scrutinised the Petition of MSEDCL and directed MSEDCL to address certain data gaps vide letter dated 10 March, 2012. Certain other information was also sought for in regard to the aforesaid Petition.

1.2.2 MSEDCL replied to a part of the queries related to the data gaps vide letter dated 27 March, 2012. Subsequently, the Commission held a Technical Validation Session (TVS) on 28 March, 2012. Post TVS, further data gaps were identified in the Petition filed by MSEDCL. These additional data gaps were communicated to MSEDCL vide letter dated 29 March, 2012. Subsequently, a meeting was held between the representatives of MSEDCL and staff of the Commission in the Commission's office on 4 April, 2012.

1.2.3 A second TVS was held by the Commission on 12 April, 2012. On 27 April, 2012, MSEDCL submitted its replies to the data gaps and also to the queries raised during the meeting held on 4 April, 2012. Subsequently, MSEDCL submitted its replies to the additional data gaps.

List of persons who attended the TVS is attached in Appendix I.

1.2.4 In its Petition submitted on 24 February, 2012, MSEDCL had prayed to allow an amount of Rs. 900 crore over and above the ARR for PF/LF incentives. However, the Commission directed MSEDCL to ensure that the ARR proposed include all such incentives, since it would give an accurate estimate of the required change in Tariff. Also, the Commission directed MSEDCL to include the actual information on power purchase and sales for the 10 months of FY 2011-12 (April 2011 to January 2012). After incorporating the above information and changes made in response to the identified data gaps and inconsistencies, MSEDCL resubmitted the

data formats with the proposed change in ARR and Tariff proposal. The changes in MSEDCL's Petition and annexures submitted in response to the identified data gaps/ inconsistencies were verified. According to the revised submissions of MSEDCL, the following changes had taken place.

**Table 3: Impact on MSEDCL's Revenue Gap due to Revision of Data**

Particular	Net Impact on Gap (Rs. crore)
<b>Expenses</b>	
Return on equity for FY 2010-11	(63)
Power purchase expenses for FY 2011-12	(402)
Depreciation including AAD for FY 2011-12	156
Interest on long-term loan for FY 2011-12	(154)
Provision for bad debts for FY 2011-12	(23)
Return on equity for FY 2011-12	(79)
O&M expenses for FY 2012-13	19
Power purchase expenses for FY 2012-13	43
Depreciation including AAD for FY 2012-13	223
Interest on long-term loan for FY 2012-13	(189)
Provision for bad debts for FY 2012-13	100
Return on equity for FY 2012-13	(79)
<b>Revenue</b>	
Net Revenue from sale of power for FY 2011-12 (estimated to decrease)	1,563
Net Revenue from sale of power for FY 2012-13 (estimated to decrease)	890
<b>Total increase in gap due to revision of data</b>	<b>2,004</b>

1.2.5 Accordingly, MSEDCL's total revenue gap was revised to Rs. 7,623 crore. The summary of the revised revenue gap is presented below as under:

**Table 4: Revised revenue gap of MSEDCL**

Sr. No.	Particular	Rs. crore	% increase in Tariff
1	Gap of FY 2010-11	(491)	(1.14%)
2	Gap of FY 2011-12	2,853	6.62%
3	Gap of FY 2012-13	3,351	7.77%
4	Capital expenditure of FY 2008-09 (deferred by the Commission due to non-submission of information in Case No. 111 of 2009)	237	0.55%
5	Gap approved to be uncovered for FY 2010-11 (approved in Case No. 100 of 2011)	405	0.94%
6	ATE Judgement (124 of 2010) surplus allowed in the provisional True up for the FY 2008-09	427	0.99%
7	Approved gap of MSPGCL (approved in Case No.	610	1.42%

Sr. No.	Particular	Rs. crore	% increase in Tariff
8	Approved gap of MSETCL	230	0.53%
9	<b>Total gap to be recovered from Tariff</b>	<b>7,623</b>	<b>17.68%</b>

### 1.3 Admission of the Petition and Regulatory process

1.3.1 The Petition of MSEDCL was admitted on 17 May, 2012. In accordance with Section 64 of the EA 2003, MSEDCL issued Public Notices in two English (The Times of India and DNA) and two Marathi (Lokmat and Sakal) newspapers inviting suggestions and objections from stakeholders on its Petition. The Public Notice was published in these newspapers on 28 May, 2012. Further, MSEDCL made copies of its Petition and Executive Summary (in both English and Marathi version) available for inspection / purchase by members of the public at MSEDCL's offices. It was also made available on MSEDCL's website ([www.mahadiscom.in](http://www.mahadiscom.in)) in free downloadable format. The Executive Summary of the Petition and copy of Public Notice were also made available on the website of the Commission ([www.mercindia.org.in](http://www.mercindia.org.in)) in downloadable format.

1.3.2 The Commission received written objections expressing concerns on several issues, including Tariff of MSEDCL, Tariff categorisation, procedural issues, distribution losses, sales projections, power purchase, cross-subsidy, schedule of charges, etc. The list of objectors, who participated in the Public Hearing, is provided in Appendix- II. The Commission held Public Hearings for MSEDCL at Amravati, Nagpur, Aurangabad, Nashik, Pune and Navi Mumbai during the period from 11 July, 2012 to 27 July, 2012, as per the following schedule. Consumer Representatives also participated actively in this process. Pursuant to the above, Public Hearings were held as follows:

**Table 5: Schedule of Public Hearings held**

Sr. No.	Place/Venue of Public Hearing	Date of hearing
1	Amravati Hall No.1, Divisional Commissioner's Office Camp, Amravati, District – Amravati	Wednesday, 11 July, 2012
2	Nagpur Vanamati Hall, V.I.P. Road, Dharampeth, Nagpur, District-Nagpur	Friday, 13 July, 2012
3	Aurangabad Meeting Hall, Office of the Divisional Commissioner, Aurangabad, District- Aurangabad	Thursday, 19 July, 2012
4	Nashik Niyojan Bhavan, Collector Office Campus, Old Agra Road, Nasik	Monday, 23 July, 2012

Sr. No.	Place/Venue of Public Hearing	Date of hearing
5	Pune Council Hall, Office of The Divisional Commissioner, Pune District- Pune	Wednesday, 25 July, 2012
6	Navi Mumbai, Agri Koli Bhavan, Sector-24, Nerul, Navi Mumbai	Friday, 27 July, 2012

1.3.3 The Commission has ensured that the due process, contemplated under law, was followed at every stage meticulously to ensure transparency and public participation. Adequate opportunity was given to all the persons concerned to submit their response in the matter. This Order is on the Petition filed by MSEDCL, which deals with the final Truing up of FY 2010-11, ARR of FY 2011-12 and FY 2012-13 and determination of Tariff for FY 2012-13. Various objections that were raised on MSEDCL's Petition after issuing the Public Notice both in writing as well as during the Public Hearings, along with MSEDCL's response and the Commission's rulings have been summarised in Section 2 of this Order.

1.3.4 In regard to the suggestions and objections raised by the consumers, the Commission had also invited the Government of Maharashtra, being owner of the State utilities, to attend the Public Hearings in Case No. 19 of 2012, so that the voices of the electricity consumers are directly heard by them.

#### 1.4 Organisation of the Order

1.4.1 For the sake of convenience, a list of abbreviations with their expanded forms has been included at the beginning of this Order. Thereafter, this Order is organised in the following Sections:

**Section 1** of the Order provides a brief background of the process undertaken by the Commission;

**Section 2** of the Order summarises the various objections raised by the objectors in writing as well as during the Public Hearings before the Commission. Each of the objections is followed by the response of MSEDCL and the ruling of the Commission on each of the issues;

**Section 3** of the Order details the Commission's analysis and decisions on the Final Truing up sought by MSEDCL for FY 2010-11;

**Section 4** of the Order discusses the Aggregate Revenue Requirement for MSEDCL for FY 2011-12 and FY 2012-13. This section also details the Commission's analysis and approval on various components of aggregate revenue requirement of MSEDCL for FY 2011-12 and FY 2012-13, including sales projections, distribution losses, energy balance, power purchase, O&M expenses, etc;

**Section 5** of the Order discusses certain other amounts claimed by MSEDCL due to Judgements from the Hon'ble ATE, previously disallowed expenses by the Commission due to non-submission of information, and other Orders which affect the ARR of MSEDCL;

**Section 6** of the Order is about the Schedule of charges to be applicable for MSEDCL;

**Section 7** of the Order discusses about the previous directives issued to MSEDCL and further directives issued in this Order; and

**Section 8** of the Order discusses the Tariff philosophy and the category-wise Tariff applicable for FY 2012-13.



## 2. OBJECTIONS, MSEDCL'S RESPONSE AND COMMISSION'S RULING

### 2.1 High power purchase cost

Dr. Ashok Pense, authorized consumer representative from Thane Belapur Industries Association, expressed doubt about the power availability from the new projects considered by MSEDCL, particularly Mundra UMPP, Khapadkheda Unit 5, Bhusawal Unit 4 & 5, and Units of M/s Adani.

Prayas Energy Group, authorised consumer representative, and Tata Motors submitted that in spite of the ever deteriorating performance of MSPGCL, MSPGCL's generation is being considered on the higher side in every Tariff Order of MSEDCL since the last 5 years. Prayas stated that year-on-year increase of 18% and 15% is observed in MSEDCL's power purchase expense in FY 2011-12 and FY 2012-13 respectively. Tata Motors also observed that in all the earlier Tariff orders from FY 2007-08 onwards, the Commission had never approved any amount towards power purchase from traders. However, this time MSEDCL has purchased substantial power from traders and the Commission has approved the same while Truing up. Tata Motors requested the Commission to look into this matter and provide proper guidelines keeping in view the actual data for the previous years. Prayas Energy Group submitted that the cost of power procured from M/s Adani and M/s JSW need to be verified based on PPA terms and conditions. It submitted that the power contracted from M/s Lanco was not considered in the Petition though MSEDCL had signed a PPA with Lanco. The status of the projects vis-a-vis the PPAs is not clear from the Petition. Prayas Energy Group also submitted that there have been delays in capacity addition in previous years resulting into higher cost of power purchase. Tata Motors also submitted that according to the submission of MSEDCL, power purchased from MSPGCL's vintage units for ZLS worked out to be Rs. 24 per kWh and requested the Commission to look into the same. Prayas requested the Commission to undertake an analysis of sales growth vis-a-vis availability of power from different power stations considering the realistic timelines of the proposed new sources of power.

Buldhana Jila Grahak Samiti highlighted that the cost of power purchase by MSEDCL has increased substantially and suggested that MSEDCL should procure power only through long-term PPAs. Shri Satish Shah and Vidarbha Chamber of Commerce & Industries submitted that power purchase expenses were too high and needed to be controlled. Vidarbha Chamber of Commerce & Industries opposed such a Tariff hike and suggested that MSPGCL should increase its generation capacity and MSEDCL should make use of non conventional methods to produce electricity. Shri Kiran Paturkar, Federation of Industries Association (Vidarbha), authorised consumer representative, and Vidyut Urja Equipments Pvt. Ltd. submitted that there has been a rise of 365% in the ARR of MSEDCL mainly on account of power purchase expenses. They suggested that MSEDCL should not

enter into the PPAs for periods longer than five years, so that it is not bound by these agreements in case of cheaper options are available in the future.

Vidyut Urja Equipments Pvt. Ltd. submitted that MSEDCL's power purchase expense has increased due to inefficiency of MSPGCL. It also stated that MSEDCL is purchasing about 19.08% of the quantum of power at more than Rs 4 per kWh and is purchasing power from MSPGCL at over Rs.5 per kWh.

Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation, Nirbhay Jan Manch and Janata Dal (Vasai Taluka) submitted that as per the list of Merit Order Dispatch given in the Petition, the average power purchase cost is Rs. 3.27 per kWh. The average power purchase cost from MSPGCL is Rs. 3.10 per kWh. Maximum rates are Rs. 5.21 per kWh, Rs. 4.73 per kWh and Rs. 4.54 per kWh. The cost of power production from New Paras unit was Rs. 4.60 per kWh and for new Parli unit was Rs. 5.60 per kWh in FY 2011-12. He therefore suggested that such high cost of power procurement from MSPGCL must be thoroughly scrutinized and MSPGCL should also be brought under the ambit of Merit Order Dispatch like other power producers.

Urja Prabodhan Kendra submitted that the audited power purchase expenses included the expenses of Power Grid (Rs. 529 crore). It suggested to show it along with transmission charges and asked MSEDCL to verify and clarify this. Subordinate Engineers' Association submitted that MSEDCL is incurring a revenue loss on account of taking supply from M. P. Madhya Kshetra Vidyut Vitaran Company. Shri Kiran Tarlekar requested the Commission to consider efficiency of generation before deciding power purchase costs.

### **MSEDCL's reply**

MSEDCL replied that it has three primary sources of firm power, viz., Maharashtra State Power Generation Company Limited (MSPGCL), Central Generating Stations and Independent Power Producers (IPP) (e.g. JSW Energy, etc.). In addition to the above sources, MSEDCL buys entire power available from Ratnagiri Gas and Power Private Limited (RGPPL), Power Trading Companies, Power Exchanges and other sources such as non-conventional energy, including co-generation, wind power and surplus power from captive power plants. MSEDCL also stated that out of total power purchase, almost 95% is procured at regulated Tariff, approved either by the Commission or Hon'ble CERC. The balance power required is procured on Round The Clock (RTC) basis or for specific period through power exchanges or through competitive bidding on transparent e-tendering basis. MSEDCL further submitted that it has considered power purchase from all available sources as the State is facing demand-supply gap, and estimated that all the available power would be consumed by its consumers. The following summary of power purchase was submitted by MSEDCL in its reply.

Sr. No.	Power Purchase	FY 2010-11 (Actual)	FY 2011-12 (Estimated)	FY 2012-13 (Projected)
1	Long-term	94%	89%	97%
2	Medium-term	-	3%	3%
3	Short term	6%	9%	-

Based on the above submission MSEDCL denied that it has been purchasing power at higher rates.

MSEDCL also submitted that it is always endeavouring to procure Non-Conventional Energy (NCE) available in the State of Maharashtra, based on the various Orders issued by the Commission from time to time. Moreover, MSEDCL is always contracting all available power from NCE sources.

Regarding power purchase from M.P. Madhya Kshetra Vidyut Co., MSEDCL took note of the issue and submitted that the matter was being investigated.

As regards costly power purchase, MSEDCL stated that it allocated the costly power from its MOD to the headquarters of Revenue Divisions to serve Zero Load Shedding (ZLS) consumers. This scheme was a revenue neutral scheme; the consumers of those regions have borne the additional cost only to the extent required for mitigation of load shedding in those areas. As directed by the Commission, due certification by third party auditor is carried out. MSEDCL has been submitting the same to the Commission. In case of excess recovery, MSEDCL has been refunding the excess reliability charge collected from the ZLS beneficiaries. Only 11% of the total quantum and 13% of the total cost of power procured in FY 2010-11 was from the sources such as traders and medium-term sources. For FY 2012-13, MSEDCL has projected only around 3% of the total power purchase cost and quantum to be procured from medium-term sources.

MSEDCL stated that there is no correlation between the power procurement cost from traders / short / medium-term source and ZLS. The decision to withdraw ZLS by MSEDCL and the relation of the same with the power procurement from traders / medium-term is not at all inter-related and both need to be considered separately.

MSEDCL submitted that, in past years, there was power procurement from traders (short / medium-term), irrespective of whether ZLS was implemented or not. MSEDCL also submitted that the withdrawal of Zero Load Shedding was based on the capacity envisaged to be available in FY 2011-12 which due to some unforeseen contingencies was not actually made available and so additional power procurement was undertaken from traders (short / medium-term). Therefore, MSEDCL stated that these two are separate parameter from the ARR perspective, which cannot be interlinked.

As regards variation between the expected and actual capacity addition in the State, MSEDCL submitted that the capacity addition envisaged for future is based on the discussion with generating company and has been provided based on the prevailing situation or the work undertaken at the site. Also, the scheduled CoD is indicated

by the generator and is not under the control of MSEDCL. Therefore, MSEDCL submitted that it can not be held responsible for any variation in the generation made available against the generation envisaged. The difference needs to be met either through implementing load shedding or by way of procurement of power from traders (short / medium-term). Considering the prevailing situation, MSEDCL has considered an option for procurement of additional power and to minimize the load shedding in the State of Maharashtra. However, MSEDCL also submitted that the consumer representatives may indicate any alternative approach to be undertaken in case of a power deficit situation. MSEDCL stated that the scheduled CoD with M/s Lanco has been revised to December 2013.

MSEDCL submitted that as per the Schedule 16 of the Annual Accounts, Power Grid expenses as well as transmission charges paid to Transmission Licensee are part of power purchase expense only. However, for the representation purpose, MSEDCL has shown the transmission charges paid to the Transmission Licensee separately.

### **Commission's ruling**

Regarding the issue raised by Tata Motors on the cost of ZLS power, the Commission has verified the same and notes that the discrepancy is because only a part of the vintage units from MSPGCL has been used as "ZLS power", whereas the remaining part has been considered as power purchase from traders in FY 2010-11. The reconciliation statement was not provided in the Petition of MSEDCL. However, MSEDCL has provided the reconciliation in reply to the query raised in this regard by the Commission. Variable charges for each of the MSPGCL's stations are determined separately by the Commission and SLDC ensures that all the power is despatched according to merit order principles in the State.

The Commission has scrutinized the power purchase cost submitted by MSEDCL and has verified the availability of power from the existing and proposed sources. Availability from new sources has been considered after detailed analysis of realistic dates of commissioning of the projects. Power availability from MSPGCL also has been accepted based on trend of actual generation of MSPGCL vis a vis generation approved in the Tariff Orders. The Commission has also considered some portion of power from bilateral sources, as the Commission's analysis indicated (as discussed in the Power Purchase Section in the chapter - ARR of FY 2011-12 and FY 2012-13) that sufficient power may not be available from long-term sources for meeting the demand. Sales projection of MSEDCL has been modified based on the trend analysis and the availability of power. Accordingly, the Commission has approved the power purchase cost for MSEDCL, the details of which have been discussed in the section of this Order covering power purchase cost of FY 2012-13.

The Commission directs MSEDCL to respond to the objection regarding power purchase from M. P. Madhya Kshetra Vidyut Co. within 30 days from the date of issuance of this Order, with a copy marked to the Commission.

## 2.2 Metering, energy audit and system losses

Shri Hemant Kapadia, authorised consumer representative, Shri Siddharth Soni, authorised consumer representative, Shri N. Ponrathnam, Urja Sahayog vehemently objected to issuing of new unmetered connections in the previous year, especially when the Commission's Order has stated that MSEDCL should move towards 100% metering. They alleged that lack of metering of the agricultural consumers has been used to understate losses and demanded an immediate independent energy audit along with 100% DTC metering. Shri T. N. Agrawal submitted that about 50% agriculture consumers are unmetered which is against the policy of the Commission which is a major source of revenue loss to the company. Shri Prasad Kokil suggested that for such non-compliance of the Commission's Order, penalty may be levied on MSEDCL and such penalty amount should be deducted from ARR of MSEDCL.

Dr. S. L. Patil, authorized consumer representative from Thane Belapur Industries Association (TBIA), submitted that unmetered Agriculture supply is a greatest bane for proper recovery of the revenue by MSEDCL leading to ever increasing purchase cost and revenue gap. MSEDCL's methodology of assessing agriculture consumption is more of a guess work. MSEDCL's statistic for agriculture consumption indicates cumulative consumption index (Sale/ HP) was 347 MU in June, 2010 and the same in March, 2011 was 1169 MU. Expressing doubt about the energy accounting he stated that third party audit & prudence check is necessary about all the expenses including the salary and interest expenses.

Shri Manjeet Deshmukh from Akhil Bhartiya Grahak Panchayat (Akola), Shri Vijay Malokar, and Vidarbha Chamber of Commerce & Industries submitted that though the losses mentioned in the Petition is about 15%, the areas like Thane, Nandurbar, Beed, Nanded, etc. have losses to the tune of 35-49%, which is not acceptable. Shri Ashish Chandrana, authorised consumer representative, submitted that the agricultural consumers' readings are never taken by MSEDCL and the loss levels are manipulated to report lower losses. He submitted that the losses are very high in rural areas as field engineers do not stay at their local office and prefer to stay at their respective head quarters.

Shri Kiran Paturkar, Shri Ashok Pendse and Dr. S. L. Patil, Maharashtra Veej Grahak Sanghatana and M/s SAIL requested the Commission to impose loss charges in Tariff, which shall be proportional to the losses in the area, as was suggested by the Shunglu Committee, so that the effect is not spread across the areas maintaining lower distribution losses. They also pointed out that MSEDCL's figures on distribution losses are not audited by any third party. Shri Paturkar

submitted that MSEDCL has been adopting a complicated system of calculating unmetered agriculture consumption and manipulating data as per their convenience. TBIA suggested that Tariff should be based on circle-wise and feeder-wise distribution losses to encourage efficiency and loss reduction in the given area.

Shri R. B. Agrawal, Shri Anil Vyas, Shri Chandrasen Wankhede objected to release of unmetered connections by MSEDCL and demanded that meters be provided for existing unmetered connections. Shri Ashish Chandrana submitted that unmetered consumer segment is being used as a cover for transfer of losses which is visible from disparity in load addition among metered and unmetered connections. He requested the Commission to take into account the difficulties faced by MSEDCL in this regard and appoint a separate agency to look into the matter, if required.

Shri Hemant Kapadia submitted that though MSEDCL has claimed that 60% of agricultural consumers and 91% of DTC installations are metered, bills are still issued on HP based tariff. In absence of DTC wise energy audit, such metering is of no use. Shri Kapadia referred to the DTC metering circular issued by MSEDCL on 8 December, 2010 which talks about fixing of responsibility on officers of MSEDCL for DTC level losses. He submitted that after almost two years of this circular, DTC wise energy accounting results are yet to be seen.

Shri Sunil Bhosle submitted that distribution loss cannot be more than 12% to 13%, but MSEDCL has projected the same as 16%. Also at some places distribution loss has been shown as 50%. Shri K. K. Jadiya also submitted that 16% loss level projected by MSEDCL is not actual.

Shri Hemant Kapadia submitted that after appointment of franchisees in Nagpur and Aurangabad, actual loss level is found higher than the loss level declared by MSEDCL for these areas. If losses are 16% then MSEDCL is not required to create new Load Shedding Groups i.e. G1, G2 and G3, which are applicable for loss level of 50% and above. These were further confirmed by MSEDCL's Circulars bearing No. 41 and 42, which purported to create three new groups for implementation of load shedding for those areas where losses range from 50% to 60%. The Commission has been directing MSEDCL since 2005 for installation of DTC metering for analyzing correct losses. However, in spite the fact that six to seven years have passed, MSEDCL has failed to install DTC meters and no energy audit and losses calculations are submitted in the Petition. He opined that without installation of 100% DTC meters, loss computations are vague. It is impossible for MSEDCL to reduce losses below 20% in FY 2012-13. He submitted that MSEDCL's data was not audited by any third party; therefore, they are totally vague and false. Hence, MSEDCL's demand for increase in tariff should be rejected.

Urja Sahayog, Aurangabad submitted that the Commission had directed to complete the installation of meters of all agricultural consumers in a period of six months and to provide new connections only with meters. However, in spite of these directives, MSEDCL is yet to meter 50 % agricultural connections. Urja

Sahayog further submitted that reduction in distribution losses by 1% would help to save 1063.5 MUs energy which would be made available for sale. Considering the present cost of Rs. 5 per kWh for power purchase, nearly Rs. 550 crore of additional revenue will be available to MSEDCL by reducing distribution loss. Further, Urja Sahayog submitted that the detection of the theft cases reported are worth Rs. 7.7 crore in FY 2010-11 and Rs. 10.7 crore in FY 2011-12. Compared to total energy handled by MSEDCL, it is only 0.026 % which is unsatisfactory in comparison to line losses declared by the MSEDCL. It submitted that the urban areas have high losses to the tune of 30% or higher. Additionally, the proposal only indicates the losses but no action plan to reduce it to an acceptable level is appearing anywhere in the proposal. Also, Urja Sahayog suggested various measures like proper working of all installed and connected meters, all installed capacitors, proper billing for all connected consumers.

Shri Pratap Hogade, Prof. Sham Patil, Shri Kiran Tarlekar and others from Maharashtra Veej Grahak Sanghatana, submitted that MSEDCL has been reporting a high agricultural consumption to cover the losses. They raised concern that the distribution losses reported in the Petition for FY 2011-12 at 16.27% and estimated for FY 2012-13 at 15.77% were misleading. They requested a thorough investigation by the Commission for the benefit of the consumers.

Shri Pratap Hogade submitted that based on data submitted by MSEDCL, the connected load per metered Agriculture consumer would be 7.73 HP/consumer, which is not possible. He also stated that MSEDCL's data suggests that 15.86 HP/consumer for FY 2012-13 and 10.28 HP/consumers (for unmetered connections) for FY 2010-11 were added for new consumers, which is not possible. He further objected that for FY 2012-13, no connections have been given under LT Agriculture unmetered category, but the rise in connected load shown is 2,71,297 HP. He added that the consumption for HT - agriculture - metered category has consistently decreased for FY 2008-09, FY 2009-10 and FY 2010-11. However, MSEDCL has shown overestimated sales for FY 2011-12 and FY 2012-13. Shri Pratap Hogade submitted that this needs to be scrutinised and checked by independent third party through energy audit of all Agriculture pumps. He requested the Commission that as it was done earlier, the Commission should analyse the Agriculture consumption norms and sales on the basis of latest, real and normal data.

Mr R. G. Tambe from Sahyadri Sakhar Karkhana Ltd. and Gharhak Panchayat, Maharashtra submitted that feeder separation is required between Agricultural and non Agricultural consumers to ensure accurate accounting of losses. Vidyut Urja Equipments Pvt. Ltd has requested the Commission to impose charges for theft losses on those feeders that supply to areas having high losses.

Tata Motors submitted that to check MSEDCL's actual distribution losses, the losses need to be calculated excluding the EHV consumers as these consumers are

fed through EHV transmission network and not connected on the distribution network of MSEDCL. Therefore, their losses are accounted in the transmission network without affecting distribution losses of MSEDCL. Tata Motors further submitted that since HT Tariff includes impact of Distribution losses (17-18%), it is incorrect to apply similar philosophy for EHV consumers (Zero distribution losses) because they are not contributing to distribution losses. A few other States like Andhra Pradesh have adopted this system to get the full picture. Tata Motors requested the Commission to modify distribution loss calculation methodology because existing method is incorrect. They also mentioned that target should be based on AT&C losses and not on distribution losses, thus requesting the Commission to issue a directive on the same.

Shri Ravindra Kaskhedikar from JanAkrosh observed that in spite of the claimed loss reduction achieved by MSEDCL, no visible benefit is available to consumers.

Shri R. B. Goenka (Vidarbha Industries Association, authorised consumer representative) submitted that MSEDCL has intentionally assessed higher consumption for unmetered agriculture consumers and consequently shown lower losses. He submitted that MSEDCL has computed the unmetered agriculture consumption based on the assumptions of 8 running hours and all the days in the month which is practically impossible. In the month of June, July & August, the Agriculture pumps are not required to run as it is monsoon. Further in the months of March, April and May, there is no crop in most of the Agriculture field and there is no water to irrigate in most of the areas. He further submitted that in their methodology, MSEDCL has considered that all the motors are working at 100% load factor, which is incorrect and impossible. He therefore suggested that the projected unmetered agriculture consumption is assessed incorrectly and is on the higher side.

Shri Pratap Hogade, Shri Kiran Tarlekar, Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation, Nirbhay Jan Manch and Janata Dal (Vasai Taluka) submitted that for the last 12 years, the Commission had been directing MSEDCL to achieve 100% metering. Each year MSEDCL has given false assurances regarding completion of metering and in the current Petition has claimed 100% metering as impossible, unviable and not useful. MSEDCL has refused to undertake any such DTC metering in rural areas. These actions of MSEDCL are against the directive of the Commission and against the spirit of the EA 2003. MSEDCL has engaged in such malpractice to avoid detection of actual losses. For the same, MSEDCL has provided trivial excuses like lack of expected Order, opposition from consumers, lack of capital provisions, etc.

Chamber of Small Industries Association (COSIA), NRB Bearings Ltd, Manometer (India) Private Limited, Paper Products Limited, Thane Manufacturers Association and Aplab Limited strongly objected the fact that most of the agriculture consumers are still unmetered. The organisations raised concerns that unmetered connections



would provide MSEDCL soft soil for manipulation of consumption as well as distribution losses. It is unfortunate that in spite of the Order of the Commission, the metering in agriculture has not been completed by MSEDCL. Therefore, the unmetered consumption and expenses towards the same may be disallowed.

Shree Halari Power loom Owner's & Weaver's Association and Bhiwandi Power loom Majoori Beam Weavers' & Owners' Association submitted that meters installed by Torrent, Distribution Franchisee in Bhiwandi, are faulty in nature and run very fast. The Associations submitted that they have repeatedly complained on this issue before the Commission and have urged MSEDCL to verify and test the meters installed by Torrent, Distribution Franchisee in Bhiwandi. They also highlighted that since the Bhiwandi city has large number of power looms, the State Government has granted them subsidy of 50% on power bills. However, this subsidy has been misused by Torrent Company by installing faulty meters.

Veej Grahak Sanghatana (Vasai), Nirbhay Jan Manch, Maharashtra Rajya Irrigation Federation and Janata Dal (Vasai Taluka) submitted that as per the Petition, the distribution loss for FY 2011-12 is 16.27% and for FY 2012-13 it is 15.77%. However, these numbers are misleading as this is the average of all consumer categories. For LT industries, the loss is usually in the range of 6% to 12%. However, an increase in Agricultural consumption is shown and losses in the range of 7% to 10% are manipulated. Even if these facts are ignored, the losses in the LT consumer category are in the range of 37% to 40%. Thus, the organisations called for a thorough investigation by the Commission for the benefit of the consumers.

SAIL & Thane Belapur Industries Association submitted that in case of MSEDCL's Chandrapur & Vashi Circle, the losses are being maintained at the level of 7% and in some other Circles, the distribution losses are high/very high (25%-36%). Therefore, SAIL suggested that MSEDCL Circles with low distribution Losses should get incentive by loading of actual distribution losses in their Circle. Further, SAIL highlighted that in the Order in Case No. 42 and 97 of 2007, Commission had viewed that the Circle-level energy audits should continue, and the erstwhile MSEB should operate these Circles as profit-centres with adequate monitoring. Thus, SAIL suggested that MSEDCL should provide incentives to the consumers in the Circles, where losses are lesser as compared to targets, by giving benefit based on efficiency. Circles with high / very high losses (25 % to 36 %) should be loaded with their actual distribution losses to ensure that consumers in such Circles are motivated to reduce distribution losses. SAIL also highlighted that MSEDCL submitted that the Circles having more losses are subjected to higher number of load shedding hours. However, SAIL expressed doubts over the ability of MSEDCL to achieve lower distribution losses. It suggested that the solution for this problem lies in charging differential T&D loss to create awareness and to reduce theft of electricity. Therefore, SAIL requested the Commission that MSEDCL's

Circles with low distribution losses should get incentive by levying of actual distribution losses in place of loading of average distribution losses for the State.

SAIL submitted that as the distribution losses have been reducing, the losses of 9% at 22 kV level are very high. It submitted that clubbing 22 kV with 11 kV is unjustified as the losses of 11 kV and 22 kV cannot be at the same level. It suggested to either segregate these losses or to club 22 kV with 33 kV level and 6% losses are allowed for wheeling at 22 kV. SAIL requested the Commission that wheeling losses for different voltage levels should be rationalized based on parameters decided in MYT and APR and the wheeling charges for 22 kV should be reduced.

Shri Ravindra Chavan, MLA, submitted that MSEDCL uses inefficient distribution transformers due to which the losses have increased and inefficiencies have been passed on to the consumers. He suggested the Commission to direct MSEDCL to stop corruption in purchasing the transformers and to purchase efficient transformers. He expressed that the distribution losses include unauthorized use of electricity, and technical losses. Most of these factors could be controlled by MSEDCL with their efforts and it makes no sense to burden consumers for the inefficiency of MSEDCL. He proposed to disallow more than 4% of distribution loss to MSEDCL. He suggested that few franchisees appointed such as Torrent could succeed to minimize distribution losses.

Shri Sayaji Patil, Shri Umeshwar Sahkari Pani Purvatha Sanstha submitted that the actual energy consumed by agriculture consumers is less than what they have been billed. Even after consistent directions from the Commission, the Petitioner has not been able to meter all agricultural consumers.

Shri Ashok Patil Kinikar, Maharashtra Rajya Irrigation Federation submitted that the Petitioner has not complied with the Commission's directive to meter all Agriculture consumers. In the Petition, the Petitioner has not mentioned any effort or problem faced during Agriculture metering in last 5 years. He further suggested that if DTC metering is completed for agricultural consumers, the actual consumption would be known.

### **MSEDCL's reply**

MSEDCL replied that it has already submitted clarification regarding the issue of metering. MSEDCL also stated that it has proposed an action plan for installation of meters of unmetered consumers. Regarding the unmetered agriculture consumption, MSEDCL replied that the detailed reasoning about release of unmetered agriculture connections as well as action plan for metering unmetered agriculture connections is given in its Petition, which is available on MSEDCL website in downloadable format. The increase in usage of electricity for agriculture consumers is because of increase in number of agriculture consumers.

<b>FY</b>	<b>Agriculture consumers</b>	<b>% increase</b>
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<b>FY</b>	<b>Agriculture consumers</b>	<b>% increase</b>
2009-10	28,01,235	4.97
2010-11	31,56,977	12.07
2011-12	33,08,310	4.79

It submitted that the following data for increase due to additional load of agriculture consumers.

<b>FY</b>	<b>HP load</b>	<b>% increase</b>
2009-10	11826196	4.77
2010-11	14903048	26.01
2011-12	15396819	3.31

MSEDCL submitted that the consumption of unmetered Agriculture consumers is decided based on consumption of metered Agriculture consumers. The consumption of metered Agriculture consumers is fixed on basis of their meter readings and the consumption of unmetered Agriculture consumers is fixed by considering the index calculated on basis of consumption of metered Agriculture consumers whose usage is generally appropriate and its load. The said methodology has been approved by the Commission. Due to increase in actual meter readings and increase in index, there is increase in unmetered agriculture consumption (955 units/ HP for FY 2009-10 and 965 units/ HP for FY 2010-11).

MSEDCL also highlighted that as per the directives of Commission, an exhaustive study had been instituted to measure the correct specific consumption for unmetered agricultural connection based on the metered connections. The findings of the study conducted by MSEDCL would be submitted to the Commission within stipulated time frame.

MSEDCL submitted that in FY 2011-12, it has released new unmetered Agriculture connections due to which there was increase in load of unmetered Agriculture consumers. Also MSEDCL has undertaken the activity of checking the load of unmetered Agriculture consumers because of which their load has revised. This has caused the increase in connected load for unmetered Agriculture consumers. MSEDCL stated that it is not taking any undue advantage of Government subsidy for unmetered Agriculture sales. In view of above, it is not true that MSEDCL has booked the distribution loss under the unmetered Agriculture consumption.

MSEDCL further submitted that the technical losses are inherent in a distribution system and can be reduced to an optimum level. The commercial losses are caused by theft, pilferage, defective meters, and errors in meter reading. The major reasons for technical losses are large scale rural electrification through long 11kV and LT lines, many stage of transformations, poor quality of equipment used in agricultural pumping in rural areas, cooler, air-conditioners and industrial loads in urban areas. MSEDCL also submitted some statistics of the main infrastructure that is being maintained by MSEDCL across the State of Maharashtra.

Asset	Quantity
Sub-stations	2,514 Nos.
HT Lines ( 33kv, 22kv and 11kv)	3, 10,910 kms.
Distribution Transformers	4,38,470 Nos.
LT Lines	5, 51,410kms.
Power Transformers	4,047 Nos.

MSEDCL also stated that it is serving the largest geographical area compared to any other State Electricity Distribution Company in the Country. Due to its large geographical spread, the length of LT line is also significantly larger. These LT lines are contributing significantly in technical losses. In addition, the LT network is also vulnerable to commercial losses. Due to far flung rural nature of Agriculture consumers across the State, non availability of quality agencies for meter reading and tendency on the part of the consumer not to keep the metering installation in order, makes it a very difficult task to take meter readings properly. Problem becomes more complex due to the system and manpower limitations of MSEDCL and the logistics involved in the meter reading of agriculture consumers. In spite of the constraints, MSEDCL has reduced the distribution loss from opening level of 30.2% in FY 2006-07 to 17.28% in FY 2010-11. MSEDCL also highlighted some activities that it undertakes to check and control the distribution loss in its licensed area of supply.

MSEDCL also provided some details about the different measures it has undertaken to check and control the technical and commercial losses in its licensed area of supply. It contended that once the distribution loss reaches certain level, process of further reduction of distribution loss becomes slow because of the inherent system loss. MSEDCL also described various steps it has undertaken for curtailing theft of electricity. Details regarding raids and theft of energy detected during FY 2005-06 to FY 2011-12 are provided as below.

Sr. No..	Year	Raids Conducted (Nos)	Theft Cases detected (Nos)	FIR Lodged (Nos)	Amount Realised (Rs. crore)	Compoundi ng (Nos)	Compound ing Amount (Rs. crore)
1	2005-06	160828	56569	8123	35.19	12365	9.20
2	2006-07	225262	59797	10162	38.77	27816	19.13
3	2007-08	476983	89880	9411	55.41	60433	33.75
4	2008-09	990092	57065	4864	44.48	42875	23.19
5	2009-10	1040041	50698	9681	54.28	31123	19.53
6	2010-11	662452	17269	5058	14.24	8428	7.71

Sr. No..	Year	Raids Conducted (Nos)	Theft Cases detected (Nos)	FIR Lodged (Nos)	Amount Realised (Rs. crore)	Compoundi ng (Nos)	Compound ing Amount (Rs. crore)
7	2011-12	719888	47633	8611	28.26	25625	17.72

MSEDCL submitted that all the energy handled by it does not get stolen, so it won't be appropriate to compare theft with total energy handled.

Regarding the issue of Circle wise Tariff based on losses, MSEDCL replied that the distribution losses in a particular geographical area depend on various factors, like consumer mix, HT: LT Ratio, status of infrastructure, voltage level of power supply, etc. Further, MSEDCL expressed difficulty to pass on the benefits to the consumers situated in Circles having lower losses than the licensee's average distribution loss and comparison of distribution loss level of different Circles vis-à-vis State's average distribution loss. Hence MSEDCL has not proposed Tariff or any incentives based on actual Circle wise distribution losses. Further, the consumers situated in Circles having comparatively higher distribution losses are already subjected to maximum load shedding than others. In case penal charge linked with Circle-wise distribution loss vis-à-vis licensee's average distribution loss is introduced then the consumers in such Circles would have to be considered at par with consumers of other Circles for the purpose of Load Shedding Protocol.

MSEDCL explained that it calculates the distribution loss for the state based on the Circle-wise losses. Some of the Circles would have distribution losses less than the licensee's average loss while some would have higher distribution losses than licensee's average distribution loss. Further, Division-wise distribution losses are considered for determining the Circle-wise distribution losses. Considering the losses of all divisions, some Divisions will have losses less than Circle's loss while some will have higher losses than Circle's Loss. In such situation, determining Tariff based on Circle-wise loss would be unfair to the consumers of the Divisions having losses less than entire Circle's average loss.

Further, MSEDCL also highlighted that the losses in a particular Circle or area depends on the geography of the area, Capacity of the Distribution System, HT: LT Ratio, consumer mix, consumption pattern etc. If some Circles or Divisions have higher losses, it would be improper to conclude that the consumers in the Circle or Division are committing thefts or any malpractice. So MSEDCL submitted that there is no need to change the current practice of determining Tariff based on Distribution Loss of the State.

### **Commission's ruling**

The Commission has noted that strong objections have been expressed in relation to the loss levels reported by MSEDCL and particularly against the status of metering and energy audit of unmetered agricultural consumers. The Commission,

though feels that there may be some genuine difficulties faced by MSEDCL in metering and meter reading of these consumers, it is ultimately the responsibility of MSEDCL as a licensee to meter all consumers as per the requirement of Section 55 of the EA 2003. The Commission directs MSEDCL to submit an action plan for metering of all unmetered consumers within 60 days from the date of this Order. The report shall lay down complete action plan of metering all the unmetered consumers within two years from the date of the report. MSEDCL is also directed not to release any further connection without metering. Henceforth, the Commission may not allow sales and power purchase cost to MSEDCL, particularly during the second control period, in relation to sales through unmetered connections. The Commission further directs MSEDCL to appoint a third party independent energy auditor to carry out a detailed feeder wise energy audit for some representative feeders supplying power to unmetered agricultural consumers. This report may be submitted to the Commission along with the report on unmetered agriculture index determination, which the Commission directed MSEDCL vide Order dated 30 December, 2011 in Case 100 of 2011.

### **2.3 Load shedding**

Shri Siddharth Soni submitted that the load shedding roadmap proposed by MSEDCL does not actually cover how the load shedding shall be removed but it describes the methodology of the implementation of load shedding. He said that the Electricity Act, 2003 disapproves discrimination of consumers and no preferential treatment should be given to any consumer or class of consumers. Load shedding is reflective of the inefficiency of the licensee who is not collecting the dues, not keeping the exact energy audit, and not observing the managerial skills. The road map proposed by MSEDCL is violating the provision of EA 2003 and clearly provides discrimination amongst consumers. He opined that according to the Shunglu Committee recommendations, accountability of the Regulator has to be towards the consumers.

Shri Saibaba Sanstha Vishvastavyavastha (Shirdi) submitted that huge number of devotees visit the religious premises managed by it. When such a place is subjected to load shedding, the devotees present in a large number face a lot of inconvenience. Hence, it requested the Commission to issue corresponding Orders.

Shri Chandrasen Wankhede objected to load shedding in rural areas. He also demanded setting up of transmission line between Karla Substation and Bhandaraj Substation. Shri R. B. Agrawal and Shri Anil Harishchandra Vyas submitted that poor O&M processes lead to unavailability of units and hence, acute energy shortage.

Shri Manjeet Deshmukh from Akhil Bhartiya Grahak Panchayat (Akola) submitted that load shedding was also due to lack of coordination between state utilities. Shri

Ashish Chandrana also requested the Commission to continue the existing load shedding protocol without any deviation.

Vidarbha Chamber of Commerce & Industries submitted that Load shedding is not only a major discomfort but has significant adverse impacts on development and standard of living. It also jeopardizes industrial & agricultural production, thus harming overall economic growth. In spite of such grave implications, neither the Government, MSEDCL nor the Commission have made any significant efforts to improve power availability. It submitted that the failure of the company in power purchase planning has forced its consumers to deal with 10-12 hours of planned load shedding in rural areas and 3-6 hours in urban areas. In addition to the planned load shedding, consumers are also subjected to unplanned load shedding & frequent maintenance outages.

Prayas Energy Group submitted that it was awaiting the Commission's Order on MSEDCL's load shedding protocol in State.

Shri R. B. Goenka, Vidarbha Industries Association, submitted that load shedding should not be based on distribution losses in the area because these losses are due to the inefficiency of the licensee and there are honest paying consumers who will suffer unnecessarily due to such discrepancy. The EA 2003 provides that there should not be any discrimination among consumers and no preferential treatment should be given to any consumer. The load shedding should also not be dependent on collection efficiency since it reflects the inefficiency of licensee. He pointed out that most of the defaulters are Government undertakings.

Shri N. Ponrathnam objected that load shedding in the name of gaathan feeder separation scheme is against the EA 2003. He also expressed reservations against the levy of reliability charges separately to consumers in the name of zero load shedding as it is mandatory for MSEDCL to supply electricity to all consumers without discrimination (universal service obligation).

Shri Ravindra Chavan, MLA, submitted that any load shedding protocol should not be sanctioned by the Commission as ensuring the quality and continuous supply of electricity is the statutory duty of a Distribution Licensee.

Thane Small Scale Industries Association doubted the claims made by MSEDCL that load shedding is done away for industrial consumers. It brought to notice that apart from the staggering holiday, industries are experiencing frequent load shedding & supply of poor quality of electricity. Hence, considering poor quality of supply by MSEDCL, Thane Small Scale Industries Association requested the Commission to disapprove the Tariff hike.

### **MSEDCL's reply**

MSEDCL replied that the matters related to load shedding has been deliberated at various Forums and the Commission has given exhaustive Orders on load shedding

principles. MSEDCL had been implementing the load shedding as per the guidelines prescribed by the Commission. It also stated that the present proceedings are for Final True up for FY 2010-11, Aggregate Revenue Requirement for FY 2011-12 and FY 2012-13 and Tariff determination for FY 2012-13 and the issue of load shedding is out of the purview of this Petition and hence MSEDCL does not have any specific comments to offer. Further, proceedings for Suo Motu hearing in the matter of load shedding Circulars No. 43 and 44 (with corrigendum) issued by MSEDCL (Case No 41 of 2012) is under process.

MSEDCL also explained that it doesn't deny the fact that 24x7 supplies should be made available to the consumers of the State as per the provisions of the Act. However, it stated that due to certain limitations, MSEDCL had to resort to load shedding.

MSEDCL replied that during initial period of 2011, due to the improved power situation, load shedding was withdrawn from the month of June 2011. Even though the planned load shedding was withdrawn; due to certain unforeseen circumstances after Oct 2011; the availability of power to MSEDCL was considerably reduced and MSEDCL had to resort to load shedding. The present peak demand of MSEDCL is around 17000 MW to 17400 MW; however the availability is around 11500 MW to 12000 MW. Thus, there is a shortfall of around ~ 5400 MW load relief of 3500 MW to 4000 MW is being sought from load management schemes in order to minimize the demand ~ supply gap. Load shedding is being carried out for about 200 to 2000 MW whenever required.

MSEDCL submitted that based on the letter submitted by Prayas Energy Group, suo motu proceedings have been undertaken by the Commission in Case No. 41 of 2012 in the matter of Load Shedding Circulars No. 43 and 44 (with corrigendum) issued by MSEDCL.

MSEDCL further highlighted that Gaothan Feeder Separation Scheme as a measure of load management is being implemented with the due approval of the Commission. MSEDCL also replied that due to Gaothan Feeder Separation Scheme, reduction in load shedding particularly to Rural/Semi-urban consumers would take place and thereby reducing the feeling of discrimination and discontent among rural consumers.

MSEDCL also stated that the Industrial consumers on Express Feeders are already free from any load shedding. The load shedding to Industrial feeders on staggering day was withdrawn since April 2012. MSEDCL further stated that there might have been instances of interruption on industrial feeder due to routine maintenance or in the event of sudden change in demand and availability; but it would be a rare phenomenon.

### **Commission's ruling**



The Commission has initiated suo-moto proceeding in the matters related to load shedding protocol being implemented by MSEDCL under Case No. 41 of 2012. However, the Commission had advised MSEDCL to present its proposal of load shedding protocols before the consumers during the public hearing so as to increase the awareness of the public about the proposed protocol. Hence, all the objections and suggestions, issues and decisions regarding load shedding shall be taken into consideration in the above referred Case No. 41 of 2012.

## **2.4 Fuel Adjustment Cost**

Major P. M. Bhagat submitted that, though FAC is variable in nature and cannot be correctly assessed prior to purchase of the electricity by the licensee, the Petition proposes to increase energy charges inclusive of FAC. Thus, Major P.M. Bhagat questioned MSEDCL's ability to assess future FAC correctly and proposal to charge the consumer before the purchase of the electricity and asked for clarification.

Shri Siddharth Soni submitted that ceiling rate on FAC could be revised; however it has to consider actual variation of fuel costs and not projections in accordance with the Regulations. The old formula can be revised but cannot be removed totally. Also, all the amendments in Tariff Regulations, 2005 and Orders of the Commission are having prospective effect and cannot be introduced with retrospective effect. So, the MYT Regulations, 2011 also must be taken into account while passing a final Order in the issue of FAC. Removal of ceiling also gives an opportunity to the licensee to increase the FAC providing the reasons for them.

M/s Ichalkaranji Co-op spinning Mills Ltd., Vidyut Urja Equipments Pvt. Ltd. and Shri Kiran Paturkar pointed out that the recently sanctioned FAC amount has already burdened the consumers with Rs. 1,483 crore. Hence, he opposed the inclusion of FAC in the Tariff as well as removal of the ceiling of 10%.

Shri Hemant Kapadia submitted that as per the Regulation, FAC shall be computed on the basis of actual variation in fuel cost relating to power generated from own generation and power procured and shall not be computed on the basis of expected or estimated variation. He further submitted that capping the FAC should not be treated as rejection of expenses but should be treated as a pre-audit pass through by the Commission before allowing such recovery of FAC. Hence FAC ceiling of 10% need not be changed. Dr. Uday Girdhari, Shri Prasad Kokil, Shri D. P. Soni and Shri Nitin Kabra also requested for not changing existing FAC ceiling limit. Shri Kapadia also mentioned that as per MSEDCL's submission, there will be no demand and supply gap by end of 2012. He observed that MSEDCL's power purchase cost is increasing due to unprofessional purchase policy and lack of timely decisions to enter into long-term power purchase contracts. Therefore, he

requested the Commission to reject MSEDCL's proposal of removing the ceiling on FAC. The same request has also been made by Garware Polyester Ltd. Shri Pratap Hogade also requested the Commission to disapprove the demand made by MSEDCL.

Prayas Energy Group noted that no analysis of actual increase in variable costs in recent times were carried out, which should be the benchmark for comparison. It also suggested that the increase in FAC be segregated as between FAC on account of working capital and on account of Fuel Cost. It pointed out that there was no merit in changing the ceiling as the CERC fuel escalation index indicates limited scope for increase in FAC anyway. It also submitted that the current Tariff Regulations were applicable only till FY 2012-13 and from FY 2013-14 onwards FAC is applicable as per new MYT Regulations. Hence there is no merit in proposed change in ceiling for about 8 months.

Vidyut Urja Equipments Pvt. Ltd. And Bharat Forge Ltd. submitted that MSEDCL is imposing FAC by adopting post facto approval from the Commission instead of vetting. They are also allowed to charge differential rates to different categories of consumers. Industrial consumers are paying with higher FAC. Hence, Vidyut Urja Equipments Pvt. Ltd has requested the Commission not to remove ceiling of 10% for levy of FAC.

Shri Ravindra Kaskhedikar from JanAkrosh, Veej Grahak Sanghatana (Vasai), Nirbhay Jan Manch, Maharashtra Rajya Irrigation Federation and Janata Dal (Vasai Taluka) requested the Commission to disapprove MSEDCL's demand for removal of FAC.

Regarding proportionate FAC being charged to consumers, Shri R.B. Goenka opposed the proposal of MSEDCL since it has increased the Tariffs of subsidizing consumers to a great extent and cross subsidies has further increased. He requested the Commission to re-look into the matter and opposed the proposal of MSEDCL to pass on high power purchase cost through FAC mechanism, as this will lead to unstable Tariffs in Maharashtra.

Central Railways submitted that MSEDCL has included 66 paise per kWh as FAC in existing Tariff and has further proposed to remove the ceiling of 10%. Central Railway opined that FAC was the maximum charge on average cost of supply. However, the Commission allowed MSEDCL to charge 10% FAC on energy charge of Tariff which has resulted in different rates for different categories. Railways opined that the FAC should not be levied on it. It raised concerns that FAC charges have adversely affected the budget allocation of Railways, operation of electric traction and has diverted the valuable resources from developmental plans. It suggested that Tariff charges must be exclusive of FAC. Thus, Railways requested the Commission for removal of FAC from the Tariff.

Shri N. Ponrathnam submitted that the present ceiling of FAC at 10% of Energy Charges should be continued and if the cost incurred exceeds the limit the same should be taken into consideration in the True up during annual Tariff fixation. He highlighted the ruling of the Commission in Case No. 102 of 2008 stating that the Commission had ruled that while determining the power purchase expenses for FY 2010-11, the latest prices have been considered, and any variation in cost of fuel or power purchase will be recovered through the FAC mechanism. However, as regards MSEDCL's request for removal of the FAC cap, the Commission, having already ruled on this matter in Case No. 102 of 2008, should not accept MSEDCL's proposal.

Shri Ravindra Chavan, MLA, submitted that the Commission should immediately disallow levy of FAC on 'costly power' as there is no provision in EA 2003 to increase Tariff more than once in a year (except cost variation in fuel). He expressed that the suggestion by MSEDCL for removal of ceiling of 10% is baseless and unexplained. He also submitted that the formula given by the Commission for recovery of FAC in the draft Order in Case No. 63 of 2012 is illegal and should not have been allowed as it burdens electricity consumers.

Shri Uday Kamat, on behalf of Yash Agro Energy, submitted that increasing FAC ceiling limit is need of the hour and he supports the proposal of increasing FAC ceiling limit.

#### **MSEDCL's reply**

MSEDCL replied that the Commission at the time of determination of Aggregate Revenue Requirement and Tariff of a particular year simultaneously determines the quantum of power to be purchased and cost of such power purchase. Regulation No. 82 of MERC (Terms and Conditions of Tariff) Regulations, 2005, and also the MERC (MYT) Regulations, 2011 provide that the changes in cost of power generation and power procurement due to changes in fuel cost shall be recovered through the Fuel Adjustment Cost formula. The said recovery however, inter-alia, does not permit levy of monthly FAC exceeding 10% of variable component of the prevailing Tariff. However, the Commission can alter such ceiling, if it so desires. The Regulation prescribes that any excess in the FAC charge over and above the ceiling is to be carried forward and shall be recovered over such future period as may be directed by the Commission.

Since the future cannot be projected, any increase in demand or shortage of power leads to procurement of costlier power in the market. The additional cost of power purchase is passed through to consumers by way of FAC mechanism. MSEDCL in its efforts to supply uninterrupted power to its consumers procures all the available power from the market, grid, etc at a price considerably higher than normal tied up power. Procurement of such costly power results into crossing the limit of approved power purchase cost by the Commission and MSEDCL needs to pass on this

additional burden to consumers through the Fuel Adjustment Cost but limited to the ceiling of 10% of the variable component of Tariff. Adjustments of power procurement cost exceeding 10% ceiling needs to be carried forward and the same gets on increasing or remain at the same level every subsequent month. Though the said Regulation provides for recovery of interest on working capital towards unrecovered FAC amount, such recovery of interest only increases the unrecovered amount and the same becomes notional relief.

In principle, FAC is meant to settle expenses relating to increase in fuel and power purchase expenses beyond the reasonable control and within the efficiency parameters laid down by the Commission. However, over a period since fuel prices are likely to continue to increase, the un-recoverable portion (above 10% ceiling) would also continue to increase. The 10% ceiling does not serve the purpose for which it is intended, since the consumer has to subsequently pay for such increase either in the manner of FAC or in the manner of energy charges in subsequent Truing up process. On the contrary, such ceiling unnecessarily aggravates the liquidity problems and adversely affects the financial health of MSEDCL.

MSEDCL further stated that due to 10% ceiling on the FAC to be levied, unrecovered FAC has accumulated to the tune of Rs. 1100 crore. Had such ceiling been not there, MSEDCL would have recovered the said amount of Rs. 1100 crore in FY 2011-12 only and the estimated revenue gap would have gone down by Rs. 1100 crore. As a consequence of such accumulation of FAC, MSEDCL had to borrow from Financial Institutions to meet its working capital requirements adding interest burden on MSEDCL.

MSEDCL further stated that no such binding provision is there in the EA, 2003 restricting levy of FAC to the maximum of 10% of the variable component. Instead, various provisions of the said Act emphasize the need for full recovery of fuel cost. It stated that the Tariff Policy also emphasizes the spirit of full cost recovery and specifically prescribes that the uncontrollable cost should be recovered speedily to ensure that future consumers are not burdened with past cost.

### **Commission's ruling**

The Commission clarifies that while determining Tariff for a financial year, the endeavour of the Commission remains to consider the prevailing FAC. This consideration helps to reset the Tariff to reflect the current level of power purchase cost of the distribution licensee. As fuel cost usually keeps on increasing, the cost of power purchase also goes up for a distribution licensee. Therefore, it is only but prudent to reset tariff considering prevailing level of FAC. In doing so, the future impact of FAC is minimised. It may also be noted that FAC can have negative adjustments when fuel prices go down.

The Commission has suo motu prepared a draft Order under Case No. 63 of 2012 on raising the FAC ceiling from 10% to 25% and has invited comments from public and stakeholders. Objections and suggestions related to this issue will be dealt with in the final order of the Commission on the above referred case.

## **2.5 Average cost of supply and cross subsidy**

Shri Hemant Kapadia, authorised consumer representative, Aurangabad, submitted that MSEDCL has not proposed any approach for reduction in cross subsidy. Industrial and commercial consumers are being loaded with huge burden of cross subsidisation ranging from 50% to 90% of average cost of supply. These two categories consume 45% of electricity purchased by MSEDCL and losses on the industrial feeders are less than 3-4%. In such circumstances, additional increase in tariff of these categories will create unrest and will also impede industrial and commercial development. He opined that MSEDCL's tariff is second highest in the country. Due to increasing Tariff MSEDCL is losing commercial consumers as they are opting for open access, which in turn is affecting MSEDCL's revenue cycle. With the above observations Shri Kapadia submitted that the Tariff of industrial and commercial categories shall not be further increased. He also prayed that the cross subsidy level shall be brought down to +/- 20%.

Dr. Uday Girdhari, Shri Narayan Pawar, Shri Santosh Kulkarni and Shri Sunil Bhosle on behalf of Marathwada Association of Small Scale Industries & Agriculture requested that Industries should be excluded from any type of Tariff hike. They submitted that Industries are used to cross-subsidize other category which is resulting in higher Tariff to Industries. Shri Nitin Kabra submitted that Industry is ready to pay cross-subsidy to Agriculture but not for the inefficiencies of MSEDCL. Dr. Ashok Pendse added that high cross subsidy provided to Agricultural consumers is adding to the burden of Industrial consumers. He further stated that the burden of cross subsidy should be borne by the State Government instead of burdening the common consumers.

Shri Pratap Hogade, Kolhaphur Jilha Sahakari Pani Puravtha Sanstha and Veej Grahak Sanghatana submitted the ACoS has been increasing substantially every year. Therefore, Shri Pratap Hogade submitted that MSEDCL lacked effective operational skills and administration and had acted against the spirit of the Electricity Act and the Tariff Policy.

Shri Kiran Paturkar and Vidyut Urja Equipments Pvt. Ltd submitted that the Hon'ble ATE delivered Judgments in Appeals Nos. 102,103 and 112 of 2010 dated 30 May, 2011 and Appeals No. 56, 67 to 73 of 2011 dated 2 September, 2011 on cross subsidy reduction, making implementation of them mandatory. Hence, Vidyut Urja Equipments Pvt. Ltd has requested the Commission to implement

Judgments of the Hon'ble ATE and reduce the cross subsidy instead of increasing it.

Shri R. B. Goenka, Vidharba Industries Association, Nagpur estimated that 1 MW and above consumers consume about 20% of the energy sold. He submitted that if MSEDCL is allowed to levy the proposed increase in cross subsidy surcharge and wheeling charge, there will be huge gain of Rs. 1149 crore to MSEDCL, when the 1 MW and above consumers are allowed complete open access as per the directives of the Ministry of Power, Govt. of India. Based on the above he urged the Commission not to allow MSEDCL the proposed cross subsidy surcharge and wheeling charges.

Shri T.N Agrawal and Shri Satish Shah submitted that the cross subsidy should be within the limits of  $\pm 20\%$  of cost of supply.

Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation, Nirbhay Jan Manch and Janata Dal (Vasai Taluka) submitted that in June 2007, the Commission had approved Average Cost of Supply as 350 paise per kWh. In June 2008, the Commission approved 362 paise per unit. In the current Petition, 519 paise per unit has been proposed for ACoS. Thus, the organisations opined that MSEDCL lacked effective operational skills and administration and had acted against the spirit of the EA 2003 and the Tariff Policy.

Shri N. Ponrathnam stated that the Tariff Policy advocates cross subsidy to be in the range of  $\pm 20\%$  of the cost of supply. Hence, MSEDCL should highlight the deviation from the Tariff Policy with the explanation for this contravention to the Tariff Policy.

Central Railways objected to the fact that it always has to bear the brunt of cross subsidies. It highlighted that as per the provisions of the EA 2003, the Tariff Policy and Regulations notified by the Commission; the State Government should bear the burden of the subsidy and hence asserted to relieve Railways from heavy burden of Cross subsidization. By highlighting various analyses, Railways submitted that that it is already having the billing rate to cost of supply as one of the highest amongst various consumer categories. It highlighted that as per the Tariff, Policy cross subsidy should be fixed within the range of  $\pm 20\%$  of cost of supply.

SAIL highlighted that the cross-subsidy for HT-I category is still above  $+ 20\%$  of ACoS. It also pointed out that MSEDCL has not indicated the impact of cross-subsidy in proposed Tariff and has not finalized roadmap for reduction of Cross-subsidy, even though it has been directed by the Commission several times. Hence, SAIL requested the Commission that while designing the Tariffs for each category; the Cross-subsidy needs to be brought within  $\pm 20\%$  of ACoS (Average Cost of Supply).

Mahamumbai Shikshan Sanstha Sanghatna submitted that forcing public charitable institutions to contribute towards subsidy for other category of consumers is unreasonable and unjustified. It also expressed concerns over the burdening of the weaker consumers to extract the subsidy amount as it would render the Institutions unsustainable.

### **MSEDCL's reply**

MSEDCL replied that the average cost of supply has consistently increased from FY 2006-07 to FY 2011-12 which has been approved by the Commission. Power Purchase cost comprises of 82% to 84% of the total cost and it has increased with the increase in purchase of electricity. MSEDCL procures 95% of electricity from long-term sources, the Tariff for which is already approved by the Commission. Remaining 5% is procured from short-term sources by means of tendering process or via power exchanges. Therefore, MSEDCL cannot maintain control over the cost of power purchased. Hence, alleging that MSEDCL has acted against the spirit of EA 2003 and the Tariff Policy is unjustified.

MSEDCL submitted that as per the provisions of the Electricity Act 2003, cross subsidies shall be progressively reduced. As per the Tariff Policy, it is expected that Tariff should progressively reflect the efficient and prudent average cost of supply and shall be within  $\pm 20\%$  of average cost of supply. It is also stated that the Commission is also actively considering to reduce the cross subsidy progressively and is contemplating to come up with Guidelines/Regulations very soon.

The present status of finalizing the road map is absolutely in initial stage and MSEDCL feels that the cross subsidy reduction in tariffs through a transparent road map can be taken up only after due consultative process of all stake holders including the State Government. As such, cross subsidy is directly linked with Aggregate Revenue Requirement and is directly impacted by various uncontrollable factors and all these issues need to be looked into while deciding the tariffs for various categories.

In view of the fact that the Commission is yet to finalize the road map and its philosophy on cross subsidy, MSEDCL is unable to make any comments on the same.

As a first step to have a tariff within  $\pm 20\%$  of the average cost of supply, MSEDCL has proposed that the energy charge payable by domestic consumers in the tariff slab of zero to hundred unit per month may be increased from 282 paise per kWh to 390 paise per kWh which is less by 10% than the landed cost of power purchase. Similarly the energy charge payable by the agriculture consumers may be increased to from 176 paise per kWh to 205 paise per kWh. This shall be considered an initiative by MSEDCL to rationalize the tariff in line with the Tariff Policy objective of tariff having a direct linkage to cost of service.

### **Commission's ruling**

The Commission notes that one of the major reasons for the rise in the average cost of supply is the increase in power purchase costs. In the present Order the Commission has undertaken detailed analysis for MSEDCL's proposed power purchase plan and cost before approving the same. As would be evident, the Commission's analysis shows that MSEDCL's power purchase plan is too optimistic. Therefore, the Commission has approved power purchase plan and cost based on the Commission's own analysis. However, regarding other components of Tariff, the Commission has analysed the same in sections relating to determination of ARR for FY 2011-12 and FY 2012-13, before approving the same.

The Commission is aware of the fact that there is a need to reduce cross subsidy. The Govt of Maharashtra (GoM) had issued specific instructions to the Commission in this respect under Section 108 of the EA 2003. The Commission has already submitted a draft report to the GoM, which proposes to lay down a roadmap for reducing cross subsidies in Maharashtra. At present the report is under consideration of the GoM.

However, the Commission has noted the objections in this regard and also MSEDCL's response to these objections. In the present Order the Commission has effected reduction in cross subsidy to some extent, which can be seen in the table on cross-subsidy at existing and proposed tariffs in the Tariff philosophy section of this Order.

The Commission is dealing with the issue of open access for consumers with load of 1 MW and above separately.

The Commission would like to note that there are various appeals pending before the Hon'ble ATE with regard to computation of CSS. Some of the appeals are Appeal No. 132 of 2011; 133 of 2011; 139 of 2011; 140 of 2011; 178 of 2011. Since the issue is subjudice, no view is being taken on the issue in the present proceedings. Therefore, the Commission retains CSS at the existing level and may consider revising the CSS at a later point in time.

### **2.6 Schedule of charges**

Shri Pratap Hogade submitted that MSEDCL proposed to double the new connection charges, miscellaneous charges, testing fees, etc. He requested the Commission to examine the charges carefully before according approval. Shri Kiran Tarlekar, Shri Vivek Velankar and Sajag Nagrik Manch submitted that the proposed increases are unreasonable and hence, the existing rates be maintained.

Shri Hemant Kapadia submitted that the existing Schedule of Charges, which was issued in 2006 can be increased by considering an increase of 15% in material cost and 50% increase in labour cost. In order to avoid difficulties, Schedule of Charges



of components of meter cubicle should be specified separately so that in case of load extension only CT can be replaced after paying charges for CT and not complete metering cubicle.

He submitted that as per Regulations notified by the Commission, incoming metering cubicle is to be provided by the licensee, however, in most of the cases the consumers are asked to procure the metering. But MSEDCL does not refund the cost of procurement of metering cubicle by the HT consumers. He also submitted that the DFs are collecting total service connection charges without providing metering cubicle.

Akhil Bhartiya Grahak Panchayat objected on length of service wire of 30 meters proposed by MSEDCL for new service connections. Shri Vivek Velankar, Sajag Nagrik Manch submitted that the Petitioner, at the time of release of new connection for consumers having load above 50 kW is making it mandatory to take an application for dedicated distribution facility. This results in higher service and connection charges at the time of taking new supply.

Shri R. B. Goenka (VIA) submitted that MSEDCL has proposed high administrative charges and operating charges to the open access users in the present Petition which lacks proper justification. For explaining the reasons and justification for open access charges, MSEDCL has described a set of activities that are exactly same as done for a consumer of MSEDCL. Hence, he suggested that the same processing fee as per schedule of charges decided by the Commission for sanction of consumer's load can be applied. The meter readings are necessarily to be taken for partial open access consumers and no separate activity is required to be done. There should not be any differentiation for a consumer of 1 MW and a consumer of 50 MW consumers of open access since the activities involved remains the same. He objected that MSEDCL is already charging high rates to open access applicants and users without the permission of the Commission. He suggested that these amounts collected in excess should be refunded to the open access consumers. In light of all the above facts, he requested the Commission to issue proper directives based on above submission.

Shri R. B. Goenka submitted that the present schedule of charges was approved way back in 2006. Thereafter, the cost of infrastructure has increased. Therefore, he supports the increase in schedule of charges as proposed by MSEDCL accept charges for open access and underground works.

Regarding the Schedule of charges applicable to consumers of MSEDCL, he submitted his views on some of the charges proposed by MSEDCL. He also highlighted that the Consumers are forced to give undertaking to carry out the work themselves by paying supervision charges, which is against the guiding principles and schedule of charges. He objected to the 1.3% normative charges being charged on service connection charges.

Regarding the proposed SOC, Vidarbha Chamber of Commerce & Industries (VCCI) submitted that while availing new connections, the workers of MSEDCL usually direct consumers to procure material required for erection of service line. Consumers are usually unaware and lack knowledge of the purpose for which the charges are being paid. Hence, Vidarbha Chamber of Commerce & Industries expressed doubts over misuse of funds by workers for Service Connection allotted by MSEDCL. Hence, instead of recovering the charges from the consumers, Vidarbha Chamber of Commerce & Industries suggested to collect only 1.3% supervision charges on estimated amount.

Shri Manjeet Deshmukh from Akhil Bharaiya Grahak Panchayat (Akola) submitted that new connection charges applied for are very high and he has requested the Commission to consider correction of the same.

Regarding Schedule of Charges for Open Access, Central Railways submitted that the processing fee and the operating charges proposed per month by MSEDCL are on the higher side and thus requested the Commission to decide the Operating charges on the basis of actual expenses without which the purpose of Open Access will be defeated.

Veej Grahak Sanghatana (Vasai), Nirbhay Jan Manch and Janata Dal (Vasai Taluka) submitted that MSEDCL's proposal to double the New Connection charges, Miscellaneous Charges, Testing Fees and others shall be fairly determined by the Commission after considering the actual expenditure incurred on such services.

Shri N. Ponrathnam objected to the proposed hike in the schedule of charges for giving connection by MSEDCL. He stated that Testing is a mandatory process for accurate determination of consumption and hence, heavy charges should not be levied on it. He also objected to separate administrative charge for Open Access (Rs.50000 per year) and suggested that the Commission should devise a mechanism so that all the cost incurred for Open Access arrangement may be taken in the form of wheeling charges (fixed charges Rs/kVA/Month or Variable Charges Rs/ kWh).

### **MSEDCL's reply**

MSEDCL replied that in accordance with EA 2003, the Commission had notified MERC (Electricity Supply Code and Other Condition of Supply) Regulations, 2005. As per the provisions of the Supply Code Regulations, MSEDCL recovers various charges approved by the Commission vide Order dated 8 September 2006 (Case No. 70 of 2005), for various services provided to consumers. MSEDCL stated that since 2006 the said charges have not been changed and various parameters of economy including inflation have changed; cost of material has substantially increased (barring few exceptional cases where it is reduced also), other administrative & labour charges are also increased. This has necessitated the need for revision of schedule of charges.

Regarding hike in Testing Charges, MSEDCL submitted that it has the proposed charges are on the basis of type of meter, duration for testing, accuracy class of the meter & hence the rates for testing charges are varying accordingly. The various rates received from NABL accredited testing standard labs have been compared and reasonable rates have been proposed for testing of meters at MSEDCL's NABL accredited labs. As MSEDCL is going to start the new activity for NABL accredited testing on commercial basis, the competitive rates have been proposed so as to attract the other electricity utilities, EHV/HT important consumers, industrial consumers, sugar industries, etc. for getting the maximum testing work at these NABL accredited labs for generating the additional revenue to MSEDCL. Considering the costly automatic equipments service maintenance, electricity cost & all other costs, MSEDCL has proposed competitive rates. MSEDCL also stated that the proposed schedule of charges of TQA lab is for those meters which are presently tested in NABL labs & are in line with the existing charges of NABL laboratory.

Regarding Reconnection Charges, MSEDCL replied that it has proposed reconnection charges after considering the increase in labour cost and inflationary indices. Also such charges to certain extent act as a deterrent and may motivate the consumers to pay the energy bills on time. This is for encouraging prompt payment and to discourage consumer from becoming defaulter.

Regarding Administrative Charges for Open Access, MSEDCL replied that MSEDCL has proposed one time Administrative Charges at the rate of Rs. 50,000/- in lump-sum from the consumer annually, to be paid in April, i.e., at the commencement of each Financial Year towards administrative expenses. MSEDCL expressed that it needs to do lot of administrative activities in respect of a non consumer who wish to avail open access. Therefore, MSEDCL has ensured that the common consumer is not burdened due to services offered to non consumers.

MSEDCL submitted that as per the provision in the Indian Electricity Rules, 1956, the length of service connection considered was 30 meters. Considering this as a basis, network was designed and this is the standard recommended practice followed in India. Hence from standardization point of view, 30 meters length was considered. MSEDCL further added that the Commission has also given in principle approval to the scheme having estimate of service connection with service wire length 30 meters. MSEDCL stated that it has already given the necessary supporting documents for 30 meters approval.

MSEDCL replied that clear cut instructions had been given to the field offices not to ask the consumers for procuring material. It also appealed the consumer (VCCI) to provide additional information about such requests for procurement of material, so that MSEDCL could take the necessary action.

### **Commission's ruling**

The Commission has dealt with the issues pertaining to determination of schedule of charges in the Section - Schedule of Charges. As regards the issues pertaining to MSEDCL seeking an undertaking for payment of dues of old consumers of a plot from the new consumers and to carry out infrastructure related work from the consumers, may be raised separately before the Commission as this issue is not within the purview of Truing up, ARR and Tariff determination.

The Commission is of the view that all the guidelines for redressal of consumer complaints have been put up on the Commission's website and the complainant can use the existing procedures to seek solution to grievances.

MSEDCL needs to recover charges as per the Schedule of Charges, which is approved under the provisions of Supply Code Regulations. Therefore, the Commission directs MSEDCL to comply accordingly.

## **2.7 Tariff applicability for different consumer categories**

Dr. Ashok Pendse stated that there is no provision of differential tariff on account of ownership or institution. Dr. Pendse and Dr. S. L. Patil also objected to the restrictive definition of cold storage units for availing Agricultural Tariffs proposed by MSEDCL. Dr. S. L. Patil submitted that HT Public Water Works should include effluent treatment plants as the same are usually environmental projects funded by the State or Central Government.

Shri Saibaba Sanstha Vishvastavyavastha, Shirdi submitted that it is a religious organisation and works as a non profit entity, thereby making losses some times. Still, their connections are metered as a Commercial connection and hence it requested to consider reduction for the same.

MSEDCL's proposition to apply LT Agriculture and HT Agriculture category "For Poultry exclusively undertaking Layer & Broiler Activities including Hatcheries" was welcomed by Omkar Hatcheries and they have requested the Commission to accept it. However, it stated that MSEDCL had initiated a process of applying commercial Tariff to such consumers from July 2011 to Mar 2012 with a retrospective effect from June 2008 onwards. It requested the Commission to direct MSEDCL to stop the application of commercial Tariff on all such units with immediate effect and apply the earlier Tariff till the Tariff Order of the Commission is implemented. It also requested the Commission that MSEDCL should be directed to withdraw its action of charging the commercial Tariff already collected from these units and refund or re-appropriate the excess amount recovered from such units by giving the necessary credits in their future bills along-with the interest there on as per the provisions of the Act.

Akhil Bharatiya Grahak Panchayat (Nashik) and Shri S.R Nargolkar requested that the benefit of ToD incentive be provided to the domestic consumers and educational institutions too.

Shri S.R. Nargolkar submitted that it was unfair to club 'for profit organisations' like malls with 'not for profit organisations' like educational institutes, etc. paying Tariff more than the industries in HT-I category. Hence, he objected including these educational institutes as commercial consumer. He suggested that the Tariff for such institutions should be either at the cost of supply if not at a subsidy. The differential treatment given to Government hospitals and educational institutes as against those run by charitable trust is objectionable as both have same goals. He also mentioned that forcing public charitable institutions to contribute towards subsidy amount for other category of consumers is unreasonable and unjustified. Burdening the weaker consumers to extract the subsidy amount would make the institutions unsustainable. The objector stated the Commission is expected to follow sub-Section 3 of Section 62 of EA 2003 and the differentiation has to be made according to the purpose for which the supply is required. This inherently means that the proposed use is a relevant criterion for determining the Tariff rates. He referred to the Judgement of the Hon'ble ATE in Appeal No. 202 of 2009, dated 20 October 2011, wherein the Hon'ble Tribunal held that educational institutes and hospitals which are run and operated by public charitable trusts / societies cannot and should not be classified into the same category as commercial establishments. He submitted that the Commission is expected to exercise powers under Section 64(2) of the Electricity Act, 2003 in Order to ensure that there is appropriate categorization of consumers on the basis of criteria laid down in the said Section, which includes the purpose for which the supply is sought. Shri Manjeet Deshmukh from Akhil Bharaiya Grahak Panchayat (Akola) also objected to this proposed categorisation by MSEDCL.

Nashik Ispat Pvt. Ltd. submitted that though the ToD advantage is given to industrial consumers, some industries are abusing this incentive to get unfair advantage. They requested the Commission and MSEDCL to simplify the procedure for increasing the contract demand at least up to the sanctioned limits for every consumer. Milind Chincholikar from NIMA submitted that the load factor incentive scheme should also be applicable to non continuous plants so that they too get its benefit.

Shri Siddharth Soni and Milind Chincholikar from NIMA submitted that small poor consumers like tea stalls, pan shops, kirana stores belonging to rural and urban areas should get access to electricity at domestic rates instead of commercial rates. However, MSEDCL has proposed to pass this benefit only to areas under gram panchayats and below 100 unit consumers. Therefore, they appealed before the Commission to pass on this benefit to urban as well as rural areas. Shri Soni also submitted that the new consumption slabs proposed by MSEDCL in LT (upto

20kW connected load) having consumption above 55 unit is unnecessary. He highlighted that it was not explained as to how it would benefit the Discom or consumers, why it is to be structured and what would be the effect of this new slab. In such a situation, he requested that in the absence of good and convincing reasons this arrangement should be struck down. He also advocated reduction in tariff categories.

Shri T. N. Agrawal suggested that common meter for shared resources which end up consuming higher number of units and which are charged as per highest slabs should be charged at Rs. 5.85 per kWh as applicable to 100-300 unit slab along with corresponding fixed charges.

Vidyut Urja Equipments Pvt. Ltd and Shri Kiran Paturkar stated that as MSEDCL has declared that the State shall be power rich and hence, the load shedding shall be stopped, the categorization between Industrial Express and Non Express connections may be dissolved and a common connection be provided without the premium for continuous supply. Kiran Paturkar also suggested changes to the provisions of maximum demand.

Shri Hemant Kapadia submitted that the Commission introduced HT-II Commercial category as residual category as non-domestic and non-industrial category through its Order dated 26 June 2008. However, introduction of this category and its interpretation by MSEDCL resulted into various disputes all over Maharashtra, as certain consumers were categorised as Commercial though the purpose of use of electricity was not commercial in nature. Only reason they were categorised as Commercial category was they were not falling under the residential or industrial category. He contended that the EA 2003 does not define the expression, "industry". The Commission's Orders also did not contain clear directives in this regard. Opinions of the consumer grievance redressal Forums and the Ombudsman also varied widely in this respect. He submitted that definition of Industry is not provided in the EA 2003, but definition of manufacturing is available in Section 2 (k) of the Factory Act 1948. As per the said definition, manufacturing also includes altering, repairing, finishing, packing, reengineering, cutting, blending, etc. He suggested that this definition should be used for defining applicability of industrial category.

Shri Prasad requested that as per the said provision of the Factory Act, 1948, transformer repairing shops should be included in the Industrial category. Shri Kapadia submitted that the Hon'ble ATE also issued Judgements against the Commission's Orders regarding methodology of reclassification and application of HT/LT Commercial consumers. The Hon'ble ATE held that to form a separate category of consumers, the nature and purpose of use of electricity shall be the deciding criterion. He has drawn the Commission's attention to the Hon'ble ATE's Judgements in Appeal No. 111 of 2008 and Appeal No. 110 of 2009 in this respect. The same objection has also been made by Transformer Repairs Association of

Maharashtra. Shri R. B. Goenka made similar objections for both LT and HT Commercial categories.

Shri Kapadia also pointed out that the Hon'ble ATE had directed to form separate categories of consumers who have intelligible differentia such as, R&D centres, testing laboratories, etc. He has referred to Judgement passed by the Hon'ble Supreme Court in this respect. He opined that Section 62(3) of the EA 2003 also emphasises determination of Tariff on the basis of nature of supply and purpose of use.

Shri Kapadia opined that MSEDCL started reclassifying consumers in the Commercial category to earn more revenue, though it had not projected the same in its Tariff Petitions, and also it raised bills with retrospective effect from June 2008. Consumers of R&D centres, workshops, processing units, assembling units, service stations, etc. were reclassified in the Commercial category without any prior notice and without seeking any clarification from the Commission. The situation has created panic amongst the consumers and unhealthy atmosphere all over the State. Dr. S. L. Patil, Thane Small Scale Industries Association also made similar objections.

Shri Pratap Hogade, Janata Dal (SE), Veej Grahak Sanghatana (Vasai), Nirbhay Jan Manch and Janata Dal (Vasai Taluka) suggested some changes in Tariff applicability.

In the context of pre cooling & cold storage units, Shri Pratap Hogade further submitted that in spite of clear cut Orders of the Commission, MSEDCL attempted to deny the agricultural Tariff to HT category on the basis of the word "produce". Post clarification from the Commission, MSEDCL vide its Commercial Circular No. 124 dated 14 October, 2010 added its own condition in Tariff applicability and tried to deny the Tariff applicability for pre- cooling & cold storage units like Raisins, Turmeric, Tamarind, Coriander, etc. Similar objections were raised by Shri Rahul B Mhaske, Food Processors, Cold Storer's & Reefer Transporters Association and Sangli Tasgaon Cold Storage Association.

Tata Motors have pointed out the incorrect levy of 2% voltage surcharge to old customers whose connections were released before 2005. There is no information about the technical committee that was to be formed as per the Commission's Order. They have requested the Commission to take necessary action on this issue.

Ichalkaranji Powerloom Weavers Co-Operative Association suggested that there should be a separate category for powerlooms as it is there in other States. Balkrishna Hatcheries submitted that hatcheries are part of poultry farming and he objected MSEDCL for applying commercial Tariff to hatcheries.

Akhil Bhartiya Grahak Panchayat suggested clubbing the Domestic and Commercial categories. It suggested that instead of increasing the Tariff for lower slabs of domestic category, the Tariff for above 300 units slab may be increased.

Bharat Forge Ltd. and Tata Motors demanded a separate category for EHV Consumers.

Shri Javed Momin, Janata Dal suggested that the Commission may change the current slabs for domestic consumers. The first slab for domestic category may be 0-200 units as there is ample growth in the consumption. He further proposed to increase the BPL category limit to 50 units.

Bharat Enterprises submitted that for the small plastic industry, energy cost have significant contribution in the production cost. The proposed increase in the Tariff for industrial consumers will increase the production cost significantly. This will make the small plastic industries difficult to survive in this era of competition and probably migrate to the neighboring states.

Shri S. R. Nargolkar, representing the Association of Hospitals in Pune, submitted that charitable institutions run without any motive for profits. Also, the purpose of a Government hospital and charitable hospital is the same. He objected to the Tariff category proposed by MSEDCL for hospitals and schools, engineering colleges run by charitable institutions.

Shri Srikrishna Patil, Maratha Chamber of Commerce submitted that the Commission may reject the proposal of MSEDCL to consider the Maximum Demand in the off-peak period. Currently, many industries have planned their activities as per the existing Tariff so that they can avail the maximum benefit of night incentive. The sudden change in the ToD Tariff applicability will make it difficult to change the planned activities of the industries.

Shri J. J. Salonki, INS Shivaji, Lonavala submitted that considering the importance of the defence activities, the separate category may be formulated for defence services.

Prayas Energy Group suggested a new approach to Tariff design:

*New LT-General category*

- Combine present LT Domestic and non-domestic categories into single LT-General category.
- Telescopic Tariff for this category with BPL Tariff for the lowest slab (say 0-50) units per month and highest Tariff for slab of more than 300 units per month.
- Tariff for the highest slab (300 units per month) should be high enough to encourage these consumers to switch to alternatives such as roof-top solar PV systems.

*Special Tariff category for +1MW consumers*

- Segregate ARRs of open access eligible consumers from the rest of the



consumers

- Will result in realistic estimation of power purchase requirement for the regulated business
- Open access eligible consumers be called 'deemed OA consumers' and should have a separate Tariff category
- Tariff for deemed OA consumers can also include a premium in addition to cross-subsidy surcharge and wheeling charge.

Shri Mahendra Jichkar submitted that the proposed new category in the HT/LT Non-domestic (Commercial) category is unnecessary and contradictory to MSEDCL's efforts in reducing cross subsidy. Since nobody in Government departments has control over the consumption of energy and no priority is given to energy conservation. He submitted that instead of providing any lower tariff, incentive towards power saving should be proposed. He further suggested that prepaid meters should be made compulsory for all Government organisations.

Datta Meghe Institute of Medical Sciences, a Deemed University, objected to applicability of LT-I Residential tariff to student hostels, which form an integral part of a medical sciences educational institute and prayed that they be considered at par with the residential quarters for essential staff, to which HT-VI (Res.) tariffs are applicable.

Shri R. B. Goenka, VIA, objected the proposal for addition of Sports Club / Health Club /Gymnasium/Swimming Pool/ Community Hall of Government/ Private /Co-operative Housing Colonies provided as these are purely commercial activities and should be charged commercial tariff. He submitted that by proposing new category LT-II A (I) - 0-20 kW category, MSEDCL has increased the cross subsidy in the tariff to provide cheaper power to Government owned educational institutes & hospitals. He stated that it was not at all necessary to create this category to support Government institutions. Regarding LT II A (III), he submitted that MSEDCL proposed Aquaculture, Sericulture, Fisheries, Cattle Breeding Farms to be added in this category which should be a part of agriculture activities. He expressed similar concerns regarding LT II (B) > 20 kW and < 50 kW and (C) > 50 kW and LT V (LT Industry).

Vidarbha Transformer Repairer & Manufacturer Association (VTRMA) submitted that there are certain anomalies in the proposal submitted by MSEDCL, particularly in the applicability of LT- V (LT industry) Tariff & LT- II (LT- Non residential or Commercial) Tariff, in respect of transformer repairing & manufacturing small scale industrial units. MSEDCL has applied LT- II (LT- Non residential or Commercial) Tariff to the existing transformer repairing units/ manufacturing units which were billed on LT- V (LT- industry) Tariff since last twenty to twenty five

years. VTRMA objected to this sudden change without obtaining approval from the Commission & without any legal basis. It demanded that workshops & repair centres may be covered under LT- V (LT- Industry) instead of LT- II (LT- Non residential or Commercial) Tariff as in repairing of transformer, the SSI Units have to manufacture HT & LT Coils in large quantity. VTRMA submitted that as the definition of manufacturing process has not been given anywhere in the Electricity Act, 2003, it is evident that there is no ambiguity that only LT- V (LT- Industry) tariff has to be made applicable to any industrial unit registered with District Industries Centre (DIC) in MIDC Area. It also welcomed MSEDCL's proposal to cover engineering workshop, engineering goods, manufacturing units under LT- V (LT- Industry). VTRMA therefore requested the Commission to make LT- V (LT- Industry) tariff applicable to industrial units and disapprove the applicability of LT- II (LT- Non residential or Commercial) Tariff to industrial units who are repairing and manufacturing transformer units in the interest of Justice.

ABVGP requested that the slab for consumption of households using small portion for commercial purpose may be raised from 100 units to 200 units. It also requested to extend this facility to small commercial hubs doing small businesses in limited area with small connected load.

Shri Mahendra Jichkar submitted that due to current tariff structure, residential category consumers are heavily loaded with higher tariff while commercial category consumers enjoy lower tariff with no upper limit on consumption. He argued that if a consumer opts for Non Domestic category instead of Domestic category, he will be more beneficial in case of higher consumption. This will encourage the Domestic category consumers to opt for Non Domestic category by engaging in small commercial activities in their residential areas. He therefore pleaded to the Commission to increase the tariff for additional slab of above 500 units consumption in the Non Domestic (LT-II) category in accordance with the tariff of domestic category for consumption above 1000 units.

Shri Prasad Karve requested the Commission to direct MSEDCL to restore the power supply to 400 primary schools in Ratnagiri and to charge domestic Tariff instead of commercial Tariff for primary schools.

Common Effluent Treatment Plant (Thane - Belapur) Association highlighted that common effluent treatment plant is a statutory requirement under the provisions of the Environment (Protection) Act, 1986 & the Water (Prevention & Control of Pollution) Act, 1974. Further, the Govt. of India, in its Financial Bill - 2012 under Section 145 of the Finance Act, 2012, has extended exemption to the Common Effluent Treatment plants for treating the effluents (Industrial trade effluent & Domestic effluent) generated by the area. With this importance in the background, the Association submitted that it executes environmental project, a statutory requirement under Environment (Protection) Act 1986, funded by the Govt. of India & State Govt. bodies and has been treating trade effluent and sewage water in

the TTC Industrial belt since 1997. Therefore, it requested the Commission to apply Tariff to its plant under the category of HT IV under the head of Public Water Works and Sewage Treatment Plants. Additionally, it requested the Commission to direct MSEDCL to refund or adjust the differential amount.

The Association of Hospitals, M.G.M. Hospital & Research Centre, Cardinal Gracias Memorial Hospital, Kaushalya Medical Foundation Trust Hospital and Bethany Hospital submitted that the proposed Tariff for HT & LT supply is different for Govt. Hospitals and non-Govt. hospitals. It objected this differentiation and reasoned that the non-Govt. hospitals are Charitable Trust Hospitals providing free and least cost medical treatment to poor patients and moreover they are non-profit organizations. The organisations suggested that the Charitable Trust Hospitals should be treated at par with Govt. hospitals and the Tariff for both should be the same. It also suggested the State Commission to separately classify the Hospitals, Educational Institutional and spiritual organizations which are service oriented and put them in a separate category for the purpose of determination of Tariff.

Premium Hatcheries & Farmas Pvt.Ltd. and Kukoochkoo Poultry Farms submitted that as the nature of hatcheries and poultry are related to agricultural activities, the Commission should approve agricultural Tariffs for Hatcheries and Poultry.

Shanti Nagar Power loom Weaver's Welfare Association suggested applying Residential Tariff for Small Shops in Rural Areas.

Mahamumbai Shikshan Sanstha Sanghatna submitted that the educational institutions render public utility services for the benefit of the society at large and are organized on a non-profit making basis. It highlighted that MSEDCL has proposed a Tariff structure whereby separate category has been proposed for educational institutes and hospitals owned by Government and a separate category is proposed for educational institutes and hospitals not owned by the Government. Mahamumbai Shikshan Sanstha Sanghatna objected this discrimination for the lack of rational nexus between the differentiation and the purpose sought to achieve. It explained that educational institutions and hospitals owned by charitable institutions are not different from the educational institutions and hospitals owned by the Government as both these categories have the public health and education as their objective, both operate on no profit, no loss basis and both strive to provide essential services to the masses. Thus, Mahamumbai Shikshan Sanstha Sanghatna requested the Commission to establish parity between Government and Non Government Educational Institutions and Hospitals.

M/s Trilegal, Solicitors, submitted on behalf of GTIL and NSICT, two private container terminals licensed by JNPT through the competitive bidding route. It stated that JNPT handles 60% of container traffic in India and avails of HT supply from MSEDCL. JNPT in turn supplied power to the objectors. It stated that in 2008 the power supply to ports were made under HT Industrial category, but due to re-

categorisation by the Commission in June 2008, the JNPT was converted to Commercial category. The impact of this on GTIL has been Rs. 28 crore and on NSICT Rs. 44 crore in the last three years. JNPT filed an appeal against this Order dated 20 June 2008 before the Hon'ble ATE, which was dismissed on ground of delay. GTIL and NSICT filed separate appeals before the Hon'ble ATE. The Hon'ble Tribunal has then allowed the ports to make representation before the Commission vide its Order dated 27 April 2012. M/s Trilegal submitted that the services of the objectors are covered under Essential Services Maintenance Act, which is handling containers. The use of electricity is primarily for functioning of cranes and power supply to refrigerated containers and supply is required on a 24 X 7 basis. Stating the ports cannot be treated as commercial establishments as the activities performed are of essential industrial nature, the objector requested that the ports may be excluded from the Commercial category and a separate category may be created for them. In this regard, the objector also quoted an extract from the Judgement of the Hon'ble ATE in Appeal No. 195 of 2009 regarding categorisation on the basis of purpose of supply.

#### **MSEDCL's reply**

Regarding the creation of new Tariff categories and change of Tariff applicability, MSEDCL replied that it has examined various issues regarding the classification of a consumer and litigations arising because of the wrong categorization. MSEDCL has proposed applicability of Tariff to different category of consumers in an exhaustive manner, to the extent possible based on the feedback received during interaction with field officers.

MSEDCL also stated that as per Section 62 of the Electricity Act, 2003, the Commission may differentiate the Tariff according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. Hence the powers to decide the Tariff category vests with the Commission.

Regarding residential Tariff for small shops in rural areas, MSEDCL replied that after considering various alternatives and due deliberations, MSEDCL has proposed that consumers, who are running small household business, can be granted preferential LT-I Tariff without installation of separate meter subject to monthly usage of 100 unit in situated in Gram Panchayat areas only. MSEDCL further stated that as the Commission has already categorised the professional work carried out by Doctors, Auditors, CAs, Engineers, Lawyers, from their residences to be under LT Domestic Category, it won't be appropriate for MSEDCL to comment.

Regarding the increase in Contract Demand, MSEDCL replied that it has taken note of the suggestions made by consumers, and, if necessary, appropriate action would be taken in this regard.

MSEDCL stated that the Hon'ble ATE in its Judgment dated 20 October, 2011 in Appeal No. 110,111,170,171,201 & 202 of 2009 & Appeal No. 70, 71, 78,79,80,81 & 82 of 2010 in the matter of Association of Hospitals, Educational Institutes & Others passed its Judgment directing the Commission to classify the hospitals; educational institutions and spiritual organizations which are service oriented and put them in a separate category for the purpose of determination of Tariff. MSEDCL has proposed to introduce a new consumer sub-category within Low Tension / High Tension non-domestic (Commercial) category consisting of all Government owned, managed and operated educational institutions including higher educational institutes (viz., Zilla Parishad/Municipal Council or Corporation Schools, Govt. Medical/Engineering Colleges, etc) but excluding Government aided educational institutes. Similarly, the said sub-categories are proposed for Government owned, managed and operated hospitals (viz., District Civil Hospitals, Primary Health Centres, etc.). MSEDCL also proposed that hospitals and educational institutes apart from the Government owned shall not be subjected to any Tariff hike and it is proposed to permit MSEDCL to charge existing Tariff to these Educational Institutions/Hospitals. MSEDCL also clarified that the new categories in the HT/LT Commercial are not subjected to any Tariff hike but it had proposed to charge Tariff at current level of Average Cost of Supply. It also mentioned that it has made the categorisation in public interest of the society and has submitted the same to the Commission. The final decision on these categories shall be taken by the Commission.

MSEDCL also highlighted that non express feeders were subjected to limited duration load shedding as and when power situation in the State necessitates the same. The Express Feeders were charged a 10% premium for continuous supply. MSEDCL would be trying to minimize the load shedding to the extent possible which would be a gradual process. Even after commencement of supply from various new sources, MSEDCL would further require some time for stabilization. Till the entire system gets stabilized and all possible lacunae in the system were resolved, MSEDCL maintained that such categorization would be required to continue for another year. Further, MSEDCL submitted that the consumers had an option to switch to non-express feeders within one month of the Tariff Order of the Commission.

Regarding the introduction to sub-category in LT Commercial/ LT Commercial Public and Government, agricultural Tariff for hatcheries/ poultry, categorization for R&D and IT Industries in Industrial Tariffs and HT IV categorization for Common effluent Treatment Plant, MSEDCL replied that it has examined various issues regarding the classification of a consumer and litigations arising from wrong categorization and based on the feedback received during interaction with field

officers, MSEDCL has proposed applicability of Tariff to different category of consumer in exhaustive manner, to the extent possible.

### **Commission's ruling**

The Commission noted that applicability of Tariff was one of the major objections during the public process initiated by the Commission. In the section covering Tariff Philosophy the Commission has spelt out its view regarding consumer categorisation and applicability of Tariff for different categories

It is important to note the Hon'ble ATE, in its Judgement dated 20 October, 2011, in Appeal No.110,111,170,171,201 & 202 of 2009 and 70,71,78,79,80,81 & 82 of 2010, has clarified that the consumer categories can be created based on the intent or purpose of use by the consumer. Therefore, the Commission has made the categories applicable keeping this Judgement in view.

The Commission has examined the Tariff proposal of MSEDCL and also examined all the suggestions/objections made by the consumers. Based on the suggestions received and also after considering the Judgement of the Hon'ble ATE in relation to categorisation of consumers, the Commission has created a new category of consumers in this Tariff Order based on the purpose of use.

## **2.8 Frequent hike in Tariff**

Shri Pratap Hogade, Maharashtra Veej Grahak Sanghatana, Shri Kiran Tarlekar from Vita Yantranlagadyogik Sahakari Sangh Ltd, Kolhaphur Jilha Sahakari Pani Puravtha sanstha and others submitted that the proposed increase of ARR of Rs. 7,623 crore amounts to 17.7% increase in tariff which is unjustified and unacceptable. Additionally, Shri Hogade and Shri Tarlekar also submitted that the Commission had approved a tariff hike of Rs. 3,625 crore in October 2011. During the period from August 2009 to December 2011, the Commission had approved hike to the tune of Rs. 10, 283 crore. Shri Tarlekar also prayed that a fixed interval be decided and followed for any such increase in future. Shri Manjeet Deshmukh from Akhil Bharatiya Grahak Panchayat (Akola) submitted that there have been seven instances of tariff hike in last two years totalling to Rs 4,800 crore which have been loaded onto the consumers already.

Shri Hemant Kapadia, authorised consumer representative, Aurangabad, submitted that the Commission has allowed 50% increase in ARR in the last two Orders dated 12 September, 2010 and 31 October, 2011. If the present Petition of MSEDCL proposing to increase the ARR by further 25% is accepted then the total rise in ARR would be 75%. He submitted that MSEDCL's tariff has been revised six times in last twenty one months and that has been done without conducting public hearings. In spite of the relief of Rs. 2,023 crore granted by the Commission through the Order dated 30 November, 2011, MSEDCL has shown a huge revenue gap. He requested the Commission to consider the Sections 62(3), 62(4), 61(C),

61(d), and 61(g) of the EA 2003, the provisions of which do not allow tariff shock to be given to consumers and it is the Commission's duty to safeguard the interests of the consumers through determination of tariff that encourages economical usage of resources, competition, good performance and reflects cost of electricity supplied.

Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation and Nirbhay Jan Manch submitted that along with the proposed Tariff hike of 17.7%, MSEDCL is also charging FAC of 40 paise per unit, which results in cumulative hike of Rs. 10800 crore, which is unjustified and unacceptable. Additionally, these organisations submitted that the Commission had approved Tariff hike of Rs. 3670 crore in December 2011, which was around 10%. Hence, the organisations opined that an additional Tariff hike of 17.7% within a span of 6 months is untenable and unjustified. He submitted that during the period from August 2009 to December 2011, the Commission had already approved hike to the tune of Rs. 10283 crore.

Shri Ashok Patil Kinikar, Maharashtra Rajya Irrigation Federation and others submitted that the tariff of the Petitioner has been revised more than five times in last year. He suggested that there should be tariff revision only once in a year

Regarding Tariff for domestic consumers, Veej Grahak Sanghatana and Shri Mahendra Jichkar submitted that the effective hike in tariff for consumers in the domestic category is 45%, which affects more than two crore consumers in Maharashtra. Akhil Bhartiya Grahak Panchayat, Shri Vivek Velankar of Sajag Nagrik Manch, Shri R.B Agrawal, Shri Vijay Malokar and Shri Anil Harishchandra Vyas objected on the Tariff hike for consumers in the 0-100 unit consumption category. Shri Manjeet Deshmukh of Akhil Bharatiya Grahak Panchayat (Akola) submitted that hike in Tariff proposed for consumption of 100 units and above for domestic consumers is unjustified since the frequent rise in fuel surcharge and energy charges has already troubled the consumers.

Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation and Nirbhay Jan Manch submitted that even though the average hike in Tariff is 17.7%, the proposed hike is 108 paise per unit for domestic consumers in the slab of 0-100 for Domestic category, which is an increase of 38% over existing Tariff. If the fixed charges are included, the cumulative hike would be 45%. They submitted that out of total 2.20 crore domestic consumers, about 1.12 crore consumers fall in the slab of 0-100 units in the domestic category. Thus, 50% of the domestic consumers are being unjustly loaded with steep Tariff hike.

Shri Mahendra Jichkar submitted that as per the contention of MSEDCL in its Petition, it is levying on consumers in the 0-100 unit slab with landed cost of power purchase. He submitted that even if that was the case, MSEDCL has also proposed to increase tariffs in other slabs in the domestic category. He also pointed out that consumers in the above 1000 units slab are paying more than double the rates than

the 0-100 units slab. He therefore urged to the Commission to decrease the Tariff proposed for higher slabs of domestic category.

Shri R. B. Goenka submitted that as per the Tariff proposal submitted by MSEDCL, the Tariff proposed for the highest slab in the domestic category will cross-subsidise other categories to the tune of 62%. The domestic category is said to be a subsidised category because of Below Poverty Line (BPL) consumers attached in this category. He requested the Commission to segregate BPL category and make a separate category for such consumers so that the cross subsidies should be correctly decided and reduced as per provisions of the Act and the Tariff Policy. He concluded that cost of supply should be brought within +/- 20% of the average cost of supply, but this should be applicable to all the subcategories of domestic and other consumers.

Shri Ravindra Chavan, MLA submitted that the Tariff hike is against the objective of the Electricity Act and Constitutional provisions. The proposed Tariff is against the objectives of Electricity Regulatory Commissions (ERC) Act, 1998, EA 2003, National Electricity Policy (NEP), the Tariff Policy (TP) and various Regulations of the Commission. He highlighted that MSEDCL has burdened LT residential category as it has proposed to double the fixed charges, increase the energy charges by 26%, a Tariff hike of 34% in the 0-100 slab and 12% Tariff hike for 101-300 units. He also objected to the proposed hike of 20% in the tariff for BPL consumers. He pointed out that the preamble of the Electricity Act, 2003 includes promoting competition in electricity industry, protecting interest of the the consumers and supply of electricity to all areas and rationalization of electricity Tariff. Thus, he expressed concerns as the proposed Tariff hike seems to violate all the principles and defeating the purpose of Act itself.

Regarding LT consumers, Shri Pratap Hogade, Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation and Nirbhay Jan Manch submitted that their association had appealed in the past to allow small poor consumers like tea stalls, pan shops and kirana stores belonging to rural and urban areas, access to electricity at domestic rates instead of commercial rates. The Commission had, vide Order in Case No. 100 of 2011 dated 30 December, 2011 had given such instructions for the same. However, MSEDCL has proposed to pass this benefit only to rural areas and only to consumers with a consumption of below 100 units a month. Shri Pratap Hogade and Ashish Chandrana appealed before the Commission to pass on this benefit to urban as well as rural areas and increase the limit to 300 units for such consumers.

Regarding agricultural Tariff, Shri Pratap Hogade, Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation and Nirbhay Jan Manch submitted that MSEDCL proposes to levy an additional charge of 30 paise per unit (Metered) and Rs. 33 to 48 per month (Non Metered) for agricultural consumers though electricity is supplied only for eight hours a day or ten hours at night. The



objectors submitted that MSEDCL is increasing tariffs under the pretext of cross subsidy reduction and highlighting increased sales to garner more subsidies from the Government. He has requested the Commission not to approve any such increase in agricultural tariffs without proper investigation of consumption patterns of agricultural pumps.

Shri Kiran Tarlekar pointed out that the industrial tariff is already among the highest in the country and the proposed rates would make the industry uncompetitive, thus leading to their closure. Regarding industrial consumers, Shri Ashish Chandrana submitted that such consumers were already paying high demand charges and further rise is not acceptable. Shri Kiran Paturkar submitted that most of the burden of this increase of Tariff has been imposing on industrial consumers. He pointed out that there has already been an increase of approximately 50% in the Tariff before this proposal and if this proposal is passed, it would move to 75% increase, most of the burden of which shall be borne by the industries. He submitted that industries are not in a position where they can bear any more strain and hence, this imposition would be unbearable and this Tariff shock is not acceptable. The objector submitted that though the Case No. 100 of 2011 allowed MSEDCL interim relief of 80% on submitted revenue whereas they claimed it on the actual audit value which was higher by Rs. 2,273 crore, thus increasing the Tariff further. Kiran Paturkar prayed to the Commission to put forth the problems of consumers before the Hon'ble ATE and the Hon'ble Supreme Court to defend the consumer interests to avoid further increase in Tariff.

Shri Anandrao Desai from Shree Bhagalakshmi Co-operative Water Supply Institution Ltd., Shri Sampat Surve from Shree Chandrasen Co-operative water Supply Institution Ltd., Shri Vitthal Thorat from Shri Koteswar Co-operative water supply Co. Ltd., Shri Anil Kadam from Shri Naikba Sahakari Pani Puravtha Sanstha Ltd., Shri Baadshah Abbas Sheikh from Shriram Sahakari Upsa Jalsinchan sanstha Ltd., Shri Sayyajirao Jadhav and Shri Vijay Gayakwad from Shri Umeshwar Sahakari Pani Puravtha Sanstha and Shri Bhanudas Shankar Pawar from Shri Jyotirling Co-operative Irrigation Company Ltd. and others objected the tariff hike and pleaded the Commission to disallow the same in the interest of the customers like them who are in a financial crisis and who still ensure minimal losses by taking supply at HT level and making prompt payments.

Deendayal Magasvargiya Sahakari Soot Girni Ltd., Islampur stated that the steep rise in tariff for HT-I Express Feeder consumers was objectionable as the rise has been consistently high, which has affected the competitiveness of this industry at large. Maharashtra Rajya Kapus Panan Mahasangh Soot Girni Ltd. submitted that the soot girni business, is reeling under the increasing cost of electricity. They provided that under current conditions, this industry is making losses and further increasing the Tariff shall overload this industry. Hence, they have objected to the rise in the Tariff for 'soot girni' industry. Loknaya Jayaprakash Narayan Shetkari

Sahakari Soot Girni Ltd. submitted that the soot girni business, being a co-operative business, is having marginal profits. He submitted that the cost of electricity is 12% in this business. He added that due to increase in cost of electricity, the business is on the verge of shutting down. Thus, the Association opposed frequent Tariff hike by MSEDCL. It also suggested that the prompt payment discount should be increased.

M/s Ichalkaranji Co-op spinning mills Ltd. submitted that the electricity rates were already raised by about 18% to 22% in FY 2010-11, thus putting a strain on the textile industry as a whole. A further rise by 18% would be an unjust raise and hence, appealed to the Commission to disallow the same.

Vidyut Urja Equipments Pvt. Ltd. (VUEPL) and Shri Kiran Paturkar submitted that as per MSEDCL's estimate, 43.03 % of total consumption of electricity in FY 2012-13 will be from the industrial category. They added that with an average distribution loss of about 2% and excellent collection efficiency, industrial consumers are playing important role for the survival of MSEDCL. With such high proportion of industrial consumption, MSEDCL should be able to achieve a low average cost of supply. However, year after year, the average cost of supply of MSEDCL has been increasing. VUEPL submitted that industries are not in a position where they can absorb any more increase in Tariffs. VUEPL has prayed to the Commission to put forth the problems of consumers before the Hon'ble ATE and the Hon'ble Supreme Court to defend the interests of consumers to avoid further increase in tariff.

Tata Motors submitted that the tariff hike should be complemented with targets for performance improvement, which is not the case with MSEDCL.

Shri Ashish Chandrana submitted that the concern expressed by Deputy Chairman, Planning Commission of India on financial health of discoms and the inclination of Planning Commission of India to allow discoms to improve their balance sheets is not a valid reason for an increase. He submitted that the above objective needs to be achieved by improving on the efficiency and management of the organization.

Subordinate Engineers' Association have submitted that although MSEDCL have proposed a reduced tariff for Government hospitals, hospitals run by charitable trusts are not included for the reduced Tariff.

Shri Kiran Paturkar suggested that MSEDCL should be on the lookout for policies and schemes funded by organisations like UNFCCC which would help ease the scenario in any way possible without charging the same onto the customer.

Shri Kapadia submitted that in view of MSEDCL envisaging no demand supply gap in FY 2012-13, purchase of costlier power from private sources should not be

required. Therefore, there shall not be any need of increasing the per unit rate of MSEDCL.

Shri Kapadia objected to MSEDCL's proposal of increasing tariff of HT Housing and Commercial categories observing that the proposed increase of 80%-90% works out higher than cost of supply by 50%-60%. He submitted that consumers seeking HT supply for group housing, commercial complexes, and mixed complexes are required to incur significant amount for development of electrical infrastructure. Further, in case of single point supply, losses are borne by the consumers.

He also submitted that the proposed increase in tariff for HT bulk supply residential consumers, who take bulk supply at single point and redistribute it to other users within its premises, is without logic and justification. In such cases, cost of infrastructure for distribution of electricity to other users and its maintenance is incurred by such a consumer. Therefore, there is no case for increasing bulk supply tariff rate from existing Rs 5.14 per kWh to Rs. 9.70 per kWh. Further, observing that the Electricity Act requires reduction in cross subsidy, he concluded that MSEDCL's proposal of increasing tariff of these categories is unrealistic and should be rejected.

He objected to MSEDCL's proposal of tariff hike in the slab of 301-500 units compared to the same slabs of commercial tariff. He submitted that residential tariff proposed by MSEDCL for consumers in the slab of 500 units and above is higher than the commercial tariff for the same usage. Therefore, in order to avoid misuse of Section 126 of the EA 2003, he suggested that the Commission should maintain residential tariff lower than the commercial tariff for all slabs of usage. Shri Ashish Chandrana also objected to higher charges levied on domestic consumers as compared to commercial consumers for higher consumption.

Shri Purshottam Navander submitted that MSEDCL's proposal to allow the benefit of agriculture tariff to only those cold storage units which store perishable items in natural form is unjustified. He submitted that most of the agricultural produce cannot be stored in cold storage without pre-processing. Based on the same, he requested to make applicability of agricultural Tariff to cold storages without any conditions.

In respect of Delayed Payment Charges (DPC), Shri Kapadia submitted that DPC is charged to consumers at the rate of 2% on the bill amount, which includes duty, taxes, FAC, etc. He further stated that if a consumer intending to avail prompt payment discount makes his payment on the second day after the due date of prompt payment after deducting the discount amount from his bill, the consumer is treated as a defaulted consumer in the next bill and charged DPC on the entire bill amount. He has requested the Commission to direct MSEDCL that in such cases,

DPC shall be applied only on the balance amount of the bill which was not paid within the due date.

Against MSEDCL's submission of consumers misusing the provisions of load factor incentive by consuming higher power in night and thus augmenting their power factor, Shri Nitin Kabra submitted when load factor incentive was introduced by the Commission, demand recorded during the night time was excluded from calculation of maximum demand. According to the Orders issued by the Commission, industries adjust their consumption to avail maximum benefits of incentives provided in Tariff. He submitted that Consumers are adjusting themselves to maximize incentives, which should not be treated as misuses and present conditions of load factor incentive and billing demand should continue without any change.

He further submitted that prevailing maximum limit of power factor incentive of 7% is not sufficient for the recovery of capital cost incurred on the equipments installed for improving power factor. Therefore, he suggested that existing maximum limit of power factor incentive of 7% needs to be increased to 12%. He suggested that in a similar manner, the Commission may increase maximum limit of power factor penalty.

Akhil Bharatiya Grahak Panchayat (Nashik) suggested that the analysis of impact of subtraction/addition proposed in Tariff for various categories like HT and LT Industrial, Commercial, Domestic, etc along with the benefits and costs should also be made available to everybody.

Chamber of Small Industries Association (COSIA), NRB Bearings Ltd, Manometer (India) Private Limited, Paper Products Limited, Thane Manufacturers Association and Aplab Limited submitted that the effective proposed Tariff hike is 21% when the fixed charges are considered along with the energy charges. Considering the gloomy economic and industrial scenario in the country, these organisations highlighted that Micro, Small and Medium Enterprises (MSMEs) are in doldrums and it would be impossible for them to operate their units if a hike of 21% is granted. These organisations also stated that the ToD rebate has not been helpful to MSMEs as it was not possible for them to run their units in the night shift and therefore, requested the Commission to grant this incentive to MSME units in General Shift also.

Maharashtra State Co-operative Textile Federation (MSCTF), while highlighting the importance of spinning industry. As the power cost is the major component of the total manufacturing cost in spinning industry, high cost of power makes it difficult for the mills to sustain this cost from viability point of view. Load shedding and high cost of power has severely affected this industry. The spinning sector falls under HT-1 Industries category (Express & Non Express Feeders). MSCTF strongly objected to hike in Tariff and also suggested to keep the power

Tariffs for co-operative spinning mills as per the Tariffs applicable to Power loom Industry.

Shri N. Ponrathnam noted that 5% increase in ARR for the FY 2011-12 & FY 2012-13 is not in line with any commercial principle as normal inflation may not be more than 5% to 10%. He also submitted that arbitrary fixation of Tariff is not envisaged in the Electricity Act 2003. One of the main principles in the Electricity Act 2003 is that the revised Tariff should not give Tariff shock to the consumers. He opined that the Tariff shock has not been precisely defined; however the increase in bill should not be more than 8.3% of the existing bill, in line with the increase in general salary levels.

Central Railway, while highlighting the importance of railways to the society, submitted that despite being the second largest consumer of electricity of MSEDCL, it has kept the tariff for traction at unreasonably high level. It expressed concerns over the proposed Tariff hike and explained how the Tariff goes against the principles stated in the EA 2003, National Electricity Policy, the Tariff Policy and MERC (Terms and Conditions of Tariff) Regulations 2005. It objected that the Tariff hike proposed for traction was highest amongst all the HT Category consumers. Central Railways also expressed concerns over difficulties in proposed electrification of the Railways network in the State due to proposed high Tariffs. It opined that the proposed Tariff doesn't reflect the cost of procurement and Voltage wise and Category wise cost of supply. It also analyzed data from various other State Discoms and concluded that the rates charged by MSEDCL are highest amongst all. Based on its analysis on cost to serve, it stated that MSEDCL has calculated cost to serve uniformly for all categories at Rs. 4.48 per kWh. Central Railway objected to this calculation method and submitted that it was not justified as the transmission losses for Railways are quite low (5.72%) as against other categories (19.68%).

Datta Meghe Institute of Medical Sciences submitted that steep hike has been considered in (1) 35% in HT-II Educational Institutes and Hospitals, express feeder category and (2) 150% in HT-VI Bulk Supply - residential complex category. It submitted that such large hikes are unsustainable for the institutions being run by a non-profit public trust and such increase will be a direct burden on the students. It therefore requested the Commission to disallow the exorbitant Tariff hikes proposed by MSEDCL.

Shri Goenka submitted that MSEDCL has withdrawn staggering load shedding in MIDC areas and for other industrial consumers. Therefore, there should not be any differentiation in tariff for express and non-express feeders. He submitted that MSEDCL is taking undue advantage of the higher Tariff for express feeder consumers and it has unilaterally changed the status of some non express feeder consumer to express feeder consumer against the Tariff Order of the Commission. Even after application by consumers to charge non express feeder Tariff, MSEDCL

has denied the same. He submitted that in spite of orders of the Forums/ Ombudsman, MSEDCL is not changing the tariff category of consumers. He further submitted that there is no separate loading of high cost power purchase to express feeder consumers which was the basic idea behind differential express feeder & non express feeder tariffs. He requested the Commission to make a single Tariff based on different voltages for express & non express feeders. He also suggested the Commission to define the express feeder since this term has not been defined by the Commission.

### **MSEDCL's reply**

#### **On justification of Tariff hike**

MSEDCL replied that the estimated revenue gap submitted in the present Petition is for two years viz., FY 2011-12 and FY 2012-13. Further such estimated revenue gap also reflects certain legitimate expenditures incurred by MSEDCL, which have not been approved in the previous Tariff Orders.

MSEDCL further stated that due to the ceiling of 10% on FAC, unrecovered FAC has accumulated to the tune of Rs. 1450 crore for FY 2011-12. Had such ceiling been not there, MSEDCL would have recovered the said amount of Rs. 1450 crore in FY 2011-12 only. The Commission has approved the accumulated FAC of Rs. 1483 crore vide its Order dated 15 June, 2012 and consequently the revenue gap would decrease by Rs. 1483 crore.

About 4% of estimated revenue gap consists of costs for which MSEDCL cannot be held directly responsible (including Capex Related Expenses for FY 2008-09, Judgment of the Hon'ble ATE and gap for Mahagenco and Mahatransco). Balance 14% of estimated revenue gap is for 2 years i.e. FY 2011-12 and FY 2012-13. Thus, MSEDCL, on an average basis is claiming about 7% hike per annum.

Total revenue gap after considering approved revenue gap for FY 2010-11, revenue short fall for FY 2011-12, projected ARR for FY 2012-13 and impact of Judgment of the Hon'ble ATE is Rs 7,623 crore which requires an average increase of about 18% in existing tariff. MSEDCL would like to state that revenue gap as projected above needs to be recovered to maintain viability of business. Further the tariff increase required on account of estimated revenue gap in FY 2012-13 is mainly attributable to increase in power purchase cost including transmission cost and the incentives / rebates provided to the consumers which are deducted from the Revenue.

MSEDCL stated that the power purchase cost including transmission cost constitutes more than 80% of Revenue Requirement of MSEDCL, on which it has no control.

MSEDCL also stated based on reasons and facts above that it is compelled to propose an increase in tariff in order to serve its customer better along with supplying reliable and quality power. It has proposed to increase energy charges for all categories except BPL consumers, Educational Institutes and Hospitals and Advertisement /Crematorium to ensure bridging of revenue gap after carrying out the restoration and rationalization of the fixed charge.

On the objection that the effective tariff hike was 21% if the hike in fixed charges is also considered, MSEDCL categorically denied this and submitted that the impact of change in fixed charges is already considered in the revenue and hence the hike is 17% and not 21%.

MSEDCL also stated that the provision of ToD for the consumption during night hours is used to flatten the load curve and is a critical tool for Demand Side Management. MSEDCL stated that ToD Rebate during night is universal provision. MSEDCL also replied that it has not introduced any new ToD Rebate but has proposed to increase substantially from existing level of 85 paise per unit to 250 paise per unit for consumption during night hours (10.00 p.m. to 06.00 a.m. next day).

#### **On steep increase in domestic tariff**

Regarding the hike in Domestic Tariff, MSEDCL replied that after analyzing the Tariff applicable to the domestic consumers having consumption 0-100 Units per month of last 5-6 years, it is evident that the Tariff applicable to these consumers was reasonable. Also the tariff applicable to these consumers was lower than that of the average cost of supply.

<b>Financial Year</b>	<b>Tariff Applicable for 0-100 Units Consumption (Rs /Unit)</b>	<b>Average cost of supply. (Rs /Unit)</b>
FY 2006-07	1.90	4.09
FY 2007-08	2.00	3.71
FY 2008-09	2.05	3.99
FY 2009-10	2.35	4.48
FY 2010-11	2.57	4.70

As per Electricity Act 2003, the cross subsidies were to be reduced progressively. As per the Tariff Policy, it is expected that the Tariff would progressively reflect the efficient and prudent average cost of supply of electricity. As a first step towards gradual reduction of cross subsidy given to Consumers having consumption 0-100 units and considering the increase in average cost of power purchase for FY 2010-11, it has proposed to charge consumers having consumption 0-100 units close to the landed cost of power purchase.

In case of Domestic consumers, MSEDCL replied that in its Petition it has proposed to increase the existing rate of 282 paise/unit to 390 paise/unit for domestic consumers having 0-100 units consumption per month as it was evident from the trend of applicable Tariff for last 5-6 years that the Tariff applicable to these consumers was not reasonable. Also the Tariff applicable to these consumers was lower than that of the average cost of supply.

MSEDCL submitted that the energy charges suggested in the present Petition are telescopic in nature which means that a consumer pays more if it uses more power. Hence, the increase in Tariff rates for 0-100 units' slabs is not just for consumers falling in the same slab but is also applicable for consumers in higher slabs.

### **On multiple tariff increases**

MSEDCL submitted the summary of tariff hike approved by the Commission in the previous years, which is given below.

Order Date	Particulars	Amount (Rs. crore)
17 August 2009	Tariff hike for FY 2010	1099
12 September 2010	Tariff hike for FY 2011	903
2 December 2010	Order on Review of Sept 10 Order	1136
31 October 2011	Interim Relief for FY 2010 and FY 2011 Truing up	3265
<b>Total</b>		<b>6,403</b>

MSEDCL stated that even though prima facie it appears that the Commission has approved Rs.6,403 crore since August, 2009, it is pertinent to note that had the Commission considered the audited, legitimate and genuine expenses of MSEDCL while determining the tariff for FY 2010-11 (Case No. 111 of 2011), the hike in December 2011 would have been minimized.

Following table shows the various charges approved by the Commission in respect of MSPGCL.

Order Date	Particulars	Amount (Rs. crore)
3 December 2009	Impact of ATE Order for RGPPL Capacity Charges	785
5 March 2010	Additional Expense Approved by ATE for MSPGCL	762
31 March 2011	MERC Order on Review of Sept 10 Order of MSPGCL	432
26 July 2011	ATE Order for MSPGCL based on CPRI Report	340



Order Date	Particulars	Amount (Rs. crore)
26 July 2011	ATE Order for MSPGCL (Parli TPS)	220
26 July 2011	ATE Order for MSPGCL (Paras TPS)	203
<b>Total</b>		<b>2,742</b>

MSEDCL submitted that as shown in the above table, the additional expenses approved to MSPGCL were because of the Review Orders/directions of the Commission or the Hon'ble ATE. MSEDCL stated that due to such approvals, MSEDCL did not get any additional revenue because these expenses were payable to MSPGCL owing to additional expenses arising due to change in power purchase cost. MSEDCL further stated that while deciding the Tariffs for MSEDCL or MSPGCL, if realistic and suitable parameters were considered for deciding the ARR and mathematical errors were avoided, the consumers in the State would not have to face such multiple tariff hikes. MSEDCL further stated that the FAC or RGPPL capacity charges, etc. were duly approved by the Commission for the legitimate expenses for increase in power purchase.

MSEDCL also submitted that the present Petition of MSEDCL is for ARR of FY 2012-13 and all the previous tariff changes have been considered on the revenue from existing tariff and MSEDCL has proposed the tariff revision to bridge the current revenue gap. MSEDCL stated that the revenue collected by MSEDCL due to Review Order (Case No. 69 of 2010) has already been considered in the revenue and necessary submissions were made in the Form 13 of the data format submitted along with the Petition under present case for respective years.

These additional expenses approved to MSPGCL with respect to Review Orders/directions of the Commission or the Hon'ble ATE. MSEDCL pointed out that such approval did not get any additional revenue because these expenses were paid to MSPGCL because of the additional expenses due to change in power purchase cost or errors of the Commission. MSEDCL further submitted that the Electricity Duty increased by the State Government does not form a part of MSEDCL revenue. As a statutory requirement, the Electricity Duty collected from the consumers; MSEDCL has to pay the same to State Government MSEDCL further stated that the FAC or RGPPL Capacity charges, etc. are duly approved by the Commission for the legitimate expenses for increase in power purchase.

MSEDCL also highlighted that, the present Petition of MSEDCL was for ARR of FY 2012-13 and all the previous Tariff changes had been considered on the revenue from existing Tariff and MSEDCL had proposed the Tariff revision to bridge the current revenue gap.

#### **On tariff categorisation of small businesses run from rural households**

MSEDCL also submitted that after considering various alternatives and due deliberation, MSEDCL had proposed that consumers, who were running small household business, may be granted preferential LT-I Tariff without installation of separate meter subject to monthly usage of 100 units when situated in Gram Panchayat areas only. It pointed out that the Commission had categorised Doctors, Auditors, CAs, Engineers and Lawyers, etc. to be categorised as LT Domestic Category consumers, and hence, it would be inappropriate for MSEDCL to comment on it.

#### **On rationale for increasing ToD rebate**

Regarding the issue of ToD, MSEDCL stated that the provision of ToD for the consumption during night hours is used to flatten the load curve and is a critical tool for Demand Side Management and ToD Rebate during night is universal provision. MSEDCL also replied that it has not introduced any new ToD Rebate but has proposed to increase substantially from existing level of 85 paise per unit to 250 paise per unit for consumption during night hours (10.00 p.m. to 06.00 a.m. next day).

#### **On higher tariffs as compared to other States**

Regarding comparison of the Tariff with other State Utilities, MSEDCL replied that the Tariff rate of MSEDCL prima facie appears to be on higher side compared to Tariff rates of other State Utilities, however, it called for the consideration of the following factors,

- a) The difference in power generation, power purchase expenses considering the diversity in the power generation sources, available power resources (Thermal/Hydro/Nuclear/NCE);
- b) MSEDCL distributes electricity in the largest geographical area in India as compared to other Distribution Utilities;
- c) Geographical diversity in the State;
- d) Variation in power purchase cost in different States;
- e) Diversity in consumer mix and consumption pattern;
- f) Economic/Industrial/Agricultural Policy of the state;
- g) Other terms and conditions of Tariff;
- h) Historically followed principles and policies regarding determination of Tariff; and
- i) Financial Position of Utilities including unrealistic assets and liabilities carry

forwarded due to unbundling into Companies, etc.

Considering above parameters, MSEDCL opined that it is not appropriate to compare stand alone Tariff of MSEDCL with the Tariffs of other State Distribution Utilities.

### **On objections against tariff hike in HT Industrial category**

With reference to Tariff of HT Industry, MSEDCL stated that the electricity Tariff applicable to HT-Industry consumer should not to be seen in isolation because the Tariff, incentives /rebates available also play an important role. MSEDCL also highlighted that the existing Tariff provides ToD rebate, LF/PF incentives, etc. which, if considered together, provides 20-25% reduction in Tariff to HT industry.

MSEDCL has proposed to charge a tariff close to landed cost of power purchase to consumers in the slab of 0-100 units. MSEDCL submitted that energy charges suggested in the present Petition are telescopic in nature which means that a consumer pays more if it uses more power. Hence, the increase in Tariff rates for slab of 0-100 units is not just for consumers falling in the same slab but is also applicable for consumers in higher slabs.

### **On higher tariff hike in Railways category**

Regarding the issue of maximum increase in the Tariff for Railways as compared to other HT Categories, MSEDCL replied that the presentation produced by the consumer is as per Order of the Commission for APR for FY 2009-10 and Tariff for FY 2010-11. The present proceedings of the Petition are for determination of ARR for FY 2011-12 and FY 2012-13. As per Tariff rates proposed in the public notice, in table for Comparison for Existing and approved ARR, it can be clearly seen that the increase in Tariff rates for Railways as compared to existing tariff is only 3%, which is much less than most of the other HT Categories.

### **Regarding Tariff hike against EA 2003, National Electricity Policy and Tariff Policy**

Regarding the objection pertaining to the proposed Tariff is against ERC Act 1998, EA 2003, National Electricity Policy, Tariff Policy and various Regulations of MERC, MSEDCL replied that the allegations made by the consumer are very subjective in nature. The statements made by the consumer are very casual and without any supporting documents. Therefore, it would be appropriate if the consumer specifies the exact Sections/Regulations under various Acts specified above which MSEDCL is not abiding.

### **Commission's ruling**

The Commission has observed that the objectors have raised issues on MSEDCL's proposal of increasing the Tariff and specifically strong objections have been expressed against increase of demand charges by 100%. However, the Commission is of the view that input costs have increased substantially, especially due to the increase in cost of fuel for power generation. Therefore, Tariff increase is inevitable. The Commission has conducted a detailed analysis of MSEDCL's proposal for power purchase and other costs before determining the Tariff.

The Commission has noted the strong objection of many consumers on multiple tariff hikes in the past couple of years. To avoid the same, the Commission has realistically in assessed MSEDCL's ARR for FY 2012-13.

On the issue of higher rise in domestic category, the Commission agrees with MSEDCL that the same needs to be done to progressively move towards tariffs reflecting average cost of supply. However, it has not considered a steep hike in tariff as considered by MSEDCL.

On the request of ToD rebate for night consumption to be made available to MSMEs for general shifts, it may be noted that the rationale for providing rebate in night hours is to promote consumers to shift their load to off-peak period. The demand from commercial and domestic consumers reduces during the night hours. As a result, the distribution licensee has surplus power during this period, which can be utilised by those consumers, who can shift their consumption to night hours. Providing ToD rebate for general shift defeats the entire purpose of ToD Tariff. Therefore, the Commission has not considered the request for ToD rebate for general shift for MSMEs.

Other issues related to tariff design have been dealt with in the Chapter on Tariff philosophy.

## **2.9 Infrastructure charges for shifting of poles**

Shri Mahendra Jichkar submitted that recovery of 50% of the actual capital expenditure which would be incurred for executing the work of shifting of electric poles / lines from the consumers under Gandhibaug, Congress Nagar & Civil Lines under Nagpur Urban Circle at the rate of 29 paise per unit over a period of twelve (12) months by way of "Infrastructure Charge" is unfair. He further submitted that as per the records, the acceptable transmission losses is 4.5% at EHV level, and assuming that the losses incurred for supply from Koradi and Khaparkheda power projects to Nagpur will be almost 1%, accordingly the amount of losses incurred for transmission of energy to other part of the State (3.5%) should be credited to the consumers of Nagpur & surrounding areas.

Shri R. B. Goenka (VIA) submitted that in one writ Petition (Public Interest Litigation) No. 51 of 2010, the Hon'ble High Court, Mumbai (Nagpur Bench), by

its Order dated 18 March, 2011 directed Nagpur Municipal Corporation & MSEDCL to complete the work of shifting of electric poles & wires within eight months from the date of Order. MSEDCL in this Petition submitted that this is a beautification work and the benefit of such shifting of electric poles & conversion of existing overhead distribution network to underground network shall be restricted to few select consumers situated in the said geographical jurisdiction of the Nagpur Municipal Corporation and though not entitled for, will receive a preferential treatment. MSEDCL requested the Commission to allow them to recover Rs. 130/- per month from consumers of Nagpur only. In this regard, VIA requested to reject the proposal since the work involved is infrastructure development work and the cost can be recovered through ARR only from the consumers of the State and should be filed under Section 61 & 62 of EA 2003. He submitted that in the past, the Commission ruled in the Tariff Order that there cannot be differential tariff for same category of consumers in the State when VIA raised the issue about implementing lower tariff for Vidarbha consumers since the power generated from Vidarbha is being transferred to other parts of the State and distribution losses are loaded even to the consumers of Vidarbha. Apart from the above, he highlighted that MSEDCL had collected extra amount from Nagpur consumers in the ZLS scheme which is to be refunded to the consumers of Nagpur and the same is not being refunded since long. Considering all above facts, he requested the Commission to disallow this prayer to recover charges from Nagpur consumers.

Akhil Bhartiya Grahak Panchayat and Shri Sachin Eknath More objected on infrastructure surcharge proposed by MSEDCL for shifting of poles and conversion from overhead connections to underground connections.

Shri N. Ponrathnam submitted that no separate collection under the heading of “infrastructure surcharge” should be collected as this will lead to unnecessary discrimination of consumers. All such expenditure should be considered as operation and maintenance expenditure if any fund or grant is provided; the same shall be reduced from the ARR. Most of these costs incurred by the MSEDCL is considered as legitimate cost and is approved. This cost needs to be shared by one and all as there will be no end to differentiating in microscopic level as who is benefited or who is to be saddled with

### **MSEDCL’s reply**

MSEDCL stated that capital expenditure schemes carried out by it were approved by the Commission based on the cost benefit analysis in order to improve the distribution system. In case of expenditure for conversion of overhead network to underground like for Nagpur Municipal Corporation (NMC), no additional benefit would take place for MSEDCL. Therefore MSEDCL has proposed to levy infrastructure surcharge from the consumers in NMC so that the burden of the cost is not transferred to other consumers of MSEDCL without availing any benefit.

**Commission's ruling**

The Commission has noted the objections. However, the Commission is of the view that the consumers in the identified areas of the Nagpur urban circles are the direct beneficiaries of this capital expenditure. Therefore, the cost incurred cannot be generalised by including it in the ARR of MSEDCL and needs to be recovered from the identified consumers. The Commission has dealt with this issue in detail in the section on Tariff Philosophy. For the sake of clarification, this amount will not be included in the regulatory asset base for recovery of depreciation, RoE, and interest

**2.10 Carbon Emission Tax**

Shri Sachin More suggested that carbon emission tax should be imposed to all consumer categories excluding BPL category. He suggested that this carbon emission tax should be on per unit basis and it should not be same for all consumer categories. It should not be more than 50 paise per unit. He stated that carbon emission tax should be revised annually and the revenue from it should be utilised by MSEDCL to create the awareness for energy conservation among its consumers.

**MSEDCL's reply**

MSEDCL submitted that it has taken a note of the suggestion regarding levying Carbon Emission Tax for excess consumption. MSEDCL stated that as per Section 43 of the Electricity Act, MSEDCL is committed to Universal Supply Obligation and is assigned the duty of supply of electricity on payment of requisite tariff for such supply. However, the Commission is the appropriate authority to decide the tariff issue and any additional charge to be levied as proposed.

**Commission's ruling**

It may be noted that MSEDCL is obligated to purchase a specified percentage of the total consumption of power in its area from renewable sources under the Renewable Purchase Obligation (RPO). The Commission, based on the mandate Section 86 (1) (e) of EA 2003, has already notified the MERC (Renewable Purchase Obligation, its compliance and implementation of REC framework), Regulations, 2010. Under the said regulations, MSEDCL has to purchase a certain percentage from renewable energy sources. Any shortfall in meeting the purchase obligation has to be met by purchase of Renewable Energy Certificates (RECs). Thus, the Commission has already taken necessary steps towards sustainability and environmental issues. Apart therefrom, there is a provision of Urja Ankur Fund in Maharashtra (2006) where fund is created by collecting an additional amount in the electricity bills but without any contribution from the energy charges. Urja Ankur Fund was designed to promote power generation using bagasse as a source during

the first phase and power generation using small hydro, municipal waste and geothermal energy in the second phase.

## **2.11 Distribution Franchisee**

Shri Pratap Hogade, Veej Grahak Sanghatana (Vasai) , Maharashtra Rajya Irrigation Federation , Nirbhay Jan Manch and Janata Dal (Vasai Taluka) submitted that it is not justified to burden poor agricultural consumers and allow limitless profits to distribution franchisees. In FY 2011-12, the average cost of purchase of electricity was 321 paise per unit. Even if transmission losses are taken into consideration and the resulting purchasing cost is considered as 350 paise per unit, the distribution franchisee company Torrent in Bhiwandi was supplied electricity at 292 paise per unit and Spanco in Nagpur was supplied electricity at 329 paise per unit. In order to benefit private franchisees, the resulting loss was loaded on the consumers of Maharashtra. Thus, they appealed to consider the recommendations of Planning Commission or the Shungulu Committee.

Shri Siddharth Soni submitted that it is not justified to provide power at rates lower than average landed cost. He submitted that in order to benefit private franchisees, the resulting loss is being loaded onto the consumers of Maharashtra.

Maharashtra Electricity Consumers Association and Rashtraye Ekta Sanghatana submitted that the distribution franchisees are provided power at very low rate by MSEDCL and these franchisees are making undue profits at the cost of consumers. The Maharashtra Electricity Consumers Association requested the Commission to take into cognizance the Shunglu Committee Report to address this concern.

Vidarbha Chamber of Commerce & Industries submitted that after the appointment of distribution franchisees in Bhiwandi circle and some divisions in Nagpur Urban Zone, the distribution losses have reduced considerably & revenue has also increased. This has reduced the inefficiency and corruption in MSEDCL. Taking clue from the above decision, Vidarbha Chamber of Commerce & Industries suggested that MSEDCL should appoint franchisees in more urban divisions to augment the revenue & reduce distribution loss due to which their profitability would be improved.

Shri Hemant Kapadia submitted that while appointing the franchisee, experience in electricity sector must be a qualifying condition. Recently appointed franchisees, SPANCO and GTL, do not have any experience of power sector which leads to poor service by them. He submitted that GTL, franchisee in Aurangabad, asked undertakings, PAN card and Photograph for each service application. Shri Prasad Kokil also raised the same issue. Shri Kokil further added that MSEDCL was serving the Aurangabad City with 26 service centers whereas GTL is having only 2 service centers. He further submitted that even though GTL is having arrears of around 200 crore, MSEDCL is not taking any action against them. Shri Ashok

Bhatpude submitted that GTL is harassing the consumers by issuing excessive bills, delayed service and poor infrastructure. It was submitted that GTL is employing un-qualified people for carrying out maintenance activities of electricity infrastructure.

The Prayas Energy Group pointed out the lack of accountability of the Distribution Franchisees with dues more than Rs 400 crore pending with them, which is adversely impacting the working capital of MSEDCL.

Shri R.B. Goenka (VIA) submitted that it was difficult to evaluate the profit / loss in franchisee area from the data submitted by MSEDCL. He expressed that a separate account for franchisee area needs to be submitted clearly showing the loss reduction in franchisee area against targeted loss reduction, revenue from sale to franchisee against revenue which the licensee would have got by selling directly to the consumers in franchisee area. He submitted that based on the nature of the replies received from MSEDCL, MSEDCL has not been evaluating the profit & loss in franchisee area and hence it definitely concerns the consumers.

Shri R.B. Goenka further submitted that there is a huge amount to recover from Nagpur Franchisee which is Rs. 170.55 crore as on 31 May, 2012. Till 31 May, 2012, the franchisee paid an amount of Rs. 521.82 crore to MSEDCL. From May 2011 till March 2012, the units sold to franchisee area had reduced but losses increased from 31.62% to 38.84%.

He highlighted that to address this concern, there is condition in the agreement that MSEDCL shall get letter of credit equivalent to two months revenue of the area of franchisee which shall be revoked in case of non-payment of any energy bill by the franchisee. The energy bills are issued on weekly basis and are to be paid within seven days from the date of bills. However, even after non-payment of huge amount, he highlighted that MSEDCL did not revoke the L.C., neither did it terminate the agreement which should have been done as per terms of agreement.

### **MSEDCL's reply**

On suggestions related to implementation of more Distribution Franchisees, MSEDCL replied that franchising out high loss making Bhiwandi circle proved to be very successful and a trend setter in power distribution sector of the country. Accordingly a few more franchisees were allotted areas and review on loss reduction was being taken regularly in review meetings. On these lines, MSEDCL clarified that it was planning to hand over some more high loss making areas of MSEDCL through franchisee.

On other issues, MSEDCL replied that the present proceedings are for final True up for FY 2010-11, Aggregate Revenue Requirement for FY 2011-12 & FY 2012-13



and Tariff Determination for FY 2012-13. Therefore, issues related to Distribution Franchisee are out of the purview of the present proceedings.

### **Commission's ruling**

The cost at which the power is purchased by the Distribution Franchisee from MSEDCL is guided by the agreement between the Distribution Franchisee and MSEDCL. The Distribution Franchisee is selected through a competitive bidding process based on maximum quoted price for the input power to be supplied by MSEDCL. The entity bidding in the DF bid has to quote a price which is same or higher than the benchmark rate, which in turn is decided by the distribution licensee based on the prevailing average billing rate, AT&C losses, etc. In addition to this, the distribution franchisee also incurs capital expenditure and operating expenditure to ensure smooth functioning in the franchised area. Hence, the actual cost for the franchisee may be higher than the cost of power purchased from MSEDCL considering existing levels of distribution loss, cost of capital expenditure, operational expenditure and the collection risk.

Regarding the issue of specific complaints and performance of the distribution franchisee, the Commission urges the aggrieved consumers to approach CGRF and make use of various provision of the Act. As the present proceedings are limited to Final True up for FY 2010-11, Aggregate Revenue Requirement for FY 2011-12 & FY 2012-13 and Tariff Determination for FY 2012-13, the issue is out of perview of present Petition.

The Commission directs MSEDCL to expedite the process of collection of outstanding arrears from the distribution franchisee and submit a report on the same within two months from the issuance of this order.

### **2.12 Classification of all expenses as Uncontrollable**

Shri Pratap Hogade, Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation, Nirbhay Jan Manch and Janata Dal (Vasai Taluka) submitted that the Commission has classified various expenses as controllable and uncontrollable expenses. In spite of this, MSEDCL has proposed all expenses as uncontrollable in the current Petition. He argued that this puts the administration and operational capabilities of MSEDCL in doubt. He suggested that based on the above, the Commission must take a prudent decision in this regard and must establish certain criteria or parameters to approve expenses accordingly.

The Ichalkaranji Co-op spinning mills Ltd., Vidyut Urja Equipments Pvt. Ltd and Kiran Paturkar objected to the fact that all expenses of MSEDCL and MSETCL are categorised as uncontrollable

Shri Kawish Dange from Subordinate Engineers' Association submitted that the deviation in interest on long-term loan capital and interest on working capital can be controlled by appropriate planning for capital expenditure and other expenditure and thus deviation can be minimized though cannot be eliminated. Therefore the expenditure on account of this head cannot be termed as uncontrollable.

Chamber of Small Industries Association (COSIA), NRB Bearings Ltd, Manometer (India) Private Limited, Paper Products Limited, Thane Manufacturers Association and Aplab Limited submitted that every year MSEDCL proposes all expenses as uncontrollable and these expenses have always been in excess of what has been approved by the Commission. COSIA observed that there were certain discrepancies of MSEDCL's submission in the Petition vis a vis the Audited Accounts particularly in respect of items like water charges, professional and consultancy fees, advertisement, vehicle running, office expenses and other miscellaneous expenses. COSIA submitted that MSEDCL's Petition seemed misleading and requested the Commission to disallow it.

Shri R. B. Goenka (VIA) submitted that all the expenditure and revenue heads cannot be considered as uncontrollable. If these extra expenses are allowed, it would mean that all inefficiencies of MSEDCL are to be passed on to the consumers and this would defeat the purpose of Tariff determination process. He requested that despite the reasons being quoted by MSEDCL, the Commission should consider all expenses as controllable for sharing of gains and losses.

### **MSEDCL's reply**

MSEDCL replied that all the deviations in the parameters considered for the True-up of FY 2010-11 are generally uncontrollable in nature and cannot be perceived or correctly estimated at the time of filing the Petition. Similar would be the case about approvals given by the Commission in APR Order, since the Commission also does not exercise any prudence check but has determined the values of said parameters on certain presumptions.

MSEDCL further stated that the expenditure incurred during FY 2010-11 is duly audited by Statutory Auditors. Entire expenditure is legitimate & genuine and reasons for the deviation have been outlined in the Main Petition. It further explained that the Commission has approved the cost for FY 2010-11 based on provisional accounts available with MSEDCL at the time of filing of Petition for APR of FY 2010-11 (Case No.100 of 2011). However, during finalization of Accounts, provisional figures have undergone revision and deviation in certain parameters occurred against the approved figures for FY 2010-11.

Considering the inflationary increase in expenses and ignoring practical and unforeseen expenses and terming the same under "controllable expenses" and allowing only partial expenditure will have direct bearing on cash flows of

MSEDCL. In the circumstance of legitimate expenditure and genuine reasons and sustainability of MSEDCL, MSEDCL has submitted before the Commission to approve the cost as per actual and pass on the entire deviation.

MSEDCL stated that as a general practice, it has given the broad sub heads of expenditure of Administration and General expenses in write up and to avoid putting all the sub heads, MSEDCL has written other expenses including water charges, professional and consultancy fees, advertisement, vehicle running, office expenses, legal expenses and other miscellaneous expenses. MSEDCL stated that this does not imply that the sub head other Expenses include the above charges. MSEDCL further stated that the Other Expenses is a general term that is used to mention certain small expenses which cannot be categorized in other Sub Heads. MSEDCL has given the details of water charges, professional and consultancy fees, advertisement, vehicle running, office expenses, legal expenses which means MSEDCL has been transparent enough to make the Consumers as well as the Commission aware about the subheads of the A&G Expenses. Hence MSEDCL explained that there have been no misleading statements made by MSEDCL and it has been transparent to the extent possible.

MSEDCL submitted that the interest expenditure on account of long-term loans depends on the outstanding loan, repayments, and prevailing interest rates on the outstanding loans. The details of the deviation in long-term loan expense for FY 2010-11 are given the Petition It also mentioned that the projected interest on long-term loans was based on projected capital expenditure and the funding of the Capex. It clarified that almost all loans availed by MSEDCL are from reputed Central Sector Financial Institutions like PFC and REC with nominal interest rates and the Commission, in the Order dated 30 December, 2011 (Case No. 100 of 2011) has treated A&G expenses; R&M expenses, Interest on working capital and distribution losses as uncontrollable.

### **Commission's ruling**

The reply of MSEDCL that the Commission does not carry out any prudence check while approving the expenses in the APR stage and ARR stage is incorrect. The Commission, at the ARR and APR stage, approves the expenses after carrying out proper scrutiny of Petitioner's submissions, consideration of various objections and suggestions and further analysis based on the above, keeping in view the provisions of Tariff Regulations.

The Commission has examined the Tariff proposal of MSEDCL and also examined all the suggestions/objections made by the consumers. The Commission is also of the view that all the expenses cannot be deemed as uncontrollable. Though MSEDCL has considered all expenses as uncontrollable, the Commission has considered various heads of expenses to be controllable and has determined the

sharing of efficiency gains/ losses on account of controllable parameters for FY 2010-11 in the chapter on True-up of FY 2010-11.

### **2.13 Hike in Fixed Charges**

Shri Pratap Hogade and Shri Kiran Tarlekar submitted that the Petition proposed to double the fixed charges of almost all the consumer categories. If the Petition is accepted, the domestic consumers, small scale industries and small traders will face steep tariff hikes and hence he requested the Commission to disapprove such demand. Akhil Bhartiya Grahak Panchayat, Vidyut Urja Equipments Pvt., Garware Polyester Ltd and Akot Industries Association also objected to the proposed hike in Fixed Charges.

Dr. Ashok Pendse and Dr. S. L. Patil strongly objected to MSEDCL's proposal of increasing Demand/Fixed Charges by 100%. Dr. Ashok Pendse added that if Fixed/Demand Charges have to increase, it should not happen only in case of Domestic, Industrial and Commercial consumers and instead, should be applicable to all category of consumers.

Shri R.B Agrawal and Shri Anil Harishchandra Vyas objected to the rise in the fixed charges. They submitted that all the reasons for increase in tariff need to be justified and only then should MSEDCL be allowed to increase the Tariff. Shri Manjeet Deshmukh from Akhil Bharatiya Grahak Panchayat (Akola) submitted that the fixed cost rise of about 100% is unjustified and unlawful. Shri Kiran Paturkar also opposed the hike in fixed charges and suggested that it can be benchmarked to similar rates across the country.

Vidarbha Chamber of Commerce & Industries submitted that as per the Commissions directives, the two part Tariff needs to be imposed for necessary revenue income. The fixed charges are to be recovered only against the maintenance cost of existing infrastructure. However, Vidarbha Chamber of Commerce & Industries strongly regretted to note that in the proposed schedule the cost of fixed charges in almost all important categories is increased by 100% or so and no proper justification is given for the same. Out of the 17.68% total Tariff hike proposed by MSEDCL, about 14% or so is only by way of doubling the fixed charges in each category of consumer.

Shri Kapadia submitted that MSEDCL's proposal of 100% increase in fixed charges in tariff is unjustified as it is based on projection of energy availability and not as per present situation. Though the Tariff Policy prescribes recovery of capital cost through fixed charges, proposal of 100% increase in demand charge and simultaneous increase in energy charge is contradictory to the Tariff Policy. Therefore, MSEDCL's proposal for increasing the fixed charges shall be rejected.

Urja Sahayog, Aurangabad submitted that the proposed hike in fixed charges should have correlation with improvement in reliability and service to consumers and MSEDCL has to provide supporting evidence for the same. It objected to MSEDCL's proposal of increasing domestic Tariff.

Dr. Uday Girdhari submitted that in the year 2008, the Commission has reduced the fixed charges due to the prevailing demand-supply gap at that time. Now MSEDCL has proposed to increase the Fixed Charges, but demand-supply gap still exist. Therefore, he prayed that increase in fixed charges should not be allowed.

Shri Saibaba Sanstha Vishvastavyavastha objected to the proposed increase in fixed charges in HV1 and HV6 categories. Akhil Bharatiya Grahak Panchayat (Nashik) submitted that the rise in the fixed charges should be justified. They also felt that MSEDCL should submit the budgetary requirement for the fixed and variables charges before submitting the demand. Shri Siddharth Soni submitted that a rise in most of the fixed charges has been envisaged without proper justification. Major P.M. Bhagat questioned the logic behind 100% increase in the fixed/demand charges. He also inquired about the total collection and the utilisation of the money collected from fixed/ demand charges.

Shri T. N. Agrawal suggested the following for reducing fixed charges:

- a) Instead of increasing charges, minimum Billing Demand may be revised from existing 50% to 80% of contract demand; and
- b) Demand charges should be separately designed for express & non-express feeders like variation in rates for energy charges.

Shri Satish Shah suggested the following methods to reduce revenue gap:

- a) Fixed Charges for Domestic consumers should be based on sanctioned load basis instead of unit based proposed in ARR;
- b) Fixed charges for LT & HT (non express) should not be increased at all as these categories are not availing facility for 24 hrs power supply and they fall in SME category;
- c) Express/Cont. process Industry: Fixed charges for continuous feeder consumers may be more compared to non-express feeder consumers;
- d) Fixed charges for urban consumers may be differentiated from rural consumers;and
- e) Min. Billing Demand may be revised from 50% to 85% as in other states; this would also result in diverting surplus demand to needy consumers.

Veej Grahak Sanghatana (Vasai), Maharashtra Rajya Irrigation Federation and Nirbhay Jan Manch submitted that if the proposal to double the fixed charges of almost all the consumer categories is accepted, the domestic consumers, small scale industries and small traders will face steep Tariff hikes and hence the organisations requested the Commission to disapprove such demand. Shri N. Ponrathnam also objected 100% hike in fix charges proposed by MSEDCL arguing that the hike will

give Tariff shocks to consumers with low load factor which is against the Tariff Policy.

Steel Authority of India Limited (SAIL) submitted that the HT-I (Express Feeder) Continuous Industries are already burdened by 10% premium over energy charges, on the basis of providing continuous supply to them. It suggested that MSEDCL should not be allowed again to increase demand charges by 100% for providing continuous supply to these consumers. It opined that there is no justification for MSEDCL to ask for increase in fixed charges and simultaneous increase in energy charges. It suggested that as energy charges are proposed to be increased, fixed charges should be proportionately reduced. It asked MSEDCL to furnish supporting facts/ figures along with analysis of its present fixed cost. Therefore, SAIL requested the Commission to reject MSEDCL's proposal for increase in fixed/ demand charges from Rs.150 per kVA to Rs.300 per kVA - a steep increase of 100% which is unreasonable and unjustified, as it is against the decision taken by Commission in Case No. 65 of 2006 and Case No. 72 of 2007.

Shri Ravindra Chavan, MLA, requested the Commission to disallow any increase in fixed charges which are doubled in residential category. He suggested that detailed analysis of cost of supply and recovery from consumers with different load factor and power factor to be done by the Commission before arbitrarily increasing the fixed charges.

Akhil Bhartiya Veej Grahak Panchayat - Vidharba Region (ABVGP) objected to the proposed rise in fixed charges for the domestic consumers across the slabs from 100% to 300%, saying it is unjustified and acceptable.

Shri Mahendra Jichkar submitted that a 100% hike in fixed charges was unjustified. He submitted that domestic and small scale industrial consumers alike will be adversely affected by such increase resulting into very steep hike in Tariff. Hike in fixed charges may also increase the cost of essential commodities which will lead to high inflation. ABVGP and Shri Jichkar requested the Commission to disapprove 100% hike in fixed charges.

ABVGP suggested that 10% to 15% concession should be given to the consumers of Vidharba region and the tariff should remain constant for a period of 3 years, as 60% of electricity in Maharashtra is generated in Vidharba region.

Shri R. B. Goenka (VIA) also submitted that MSEDCL's proposal of doubling of fixed/demand charges is unjustified. He highlighted that the Commission in the past Tariff Orders had ruled that till MSEDCL supplies 24 x 7 power to the consumers, the demand charges shall be kept low. Accordingly, MSEDCL is not authorized to increase the fixed charges as MSEDCL is still undertaking load shedding.

**MSEDCL's reply**

MSEDCL replied that the total expenditure as calculated and given in the ARR Petition has two components, i.e., variable component and fixed component. Variable component accounts for the expenditure which varies as per the availability of power for example; power purchase expenses, transmission charges, etc; whereas, fixed component is one which is not directly linked to the consumption of power and is spent in spite of non-availability of power, for example, O&M expenses, depreciation, interest, finance charges, etc. In other words, the variable charges are directly related to MUs purchased whereas fixed charges are independent of MUs purchased/handled. If the comparison of fixed expenses is made with the fixed revenue at the existing tariff for FY 2012-13, it can be observed that presently only 60% of fixed expenditure is being recovered from fixed charges levied on consumers.

Further, MSEDCL stated that it has been the Commission's policy of recovering the fixed charges of MSEDCL through a fixed tariff applicable to the consumers (to the extent possible). In the June 2008 tariff Order, the Commission unilaterally decided to reduce the fixed charges applicable to different categories of consumers citing the reasons of reduced availability of power. The logic behind said decision to reduce the fixed charges may not hold good for certain specific categories of consumers like HT-I Industries (Express feeder), HT-PWW (Express feeder), etc. since these categories of consumers are exempted from load shedding. Similarly, in case of HT Industries (non-express feeder) & HT-PWW (non express feeder) consumers were in recent past subjected to only 16 hours of load shedding every week which has however now been withdrawn. It further stated that in its tariff order dated 5 May, 2000 while determining the fixed charge component of the tariff, the Commission stated that the recovery of fixed costs should come from fixed charges and has also observed that the level of fixed charge prevailing from time to time being not compatible with the fixed expenditure, the fixed charge component of tariff needs to be gradually increased in due course.

MSEDCL also highlighted various measures which would result into reduction in demand supply gap and the load shedding is expected to be withdrawn in the State during FY 2012-13. Based on the previous order of the Commission, MSEDCL has proposed the reinstatement of the fixed charges. However, the determination of the energy charges will be based on the revenue gap determined by the Commission for the FY 2012-13 including regulatory adjustments for previous years.

On the basis of the submissions made in the foregoing paragraphs and also considering the fact about the additional availability of power to the consumers will result in uninterrupted supply of power to majority of consumers, MSEDCL has therefore requested the Commission that the fixed charges need to be reinstated to the level of Fixed Charges / Demand Charges prevailing as per Tariff order dated 20 October, 2006.

MSEDCL also stated that since the additional availability of power supply would result into uninterrupted power supply, therefore based on the principles as stated in the previous order by the Commission, MSEDCL is entitled to recover the total fixed component of the cost through the fixed charges to be billed to the consumers. The Commission in Order for BEST for Aggregate Revenue Requirement and Tariff for FY 2011-12 has made following observations regarding fixed charges, which also needs to be taken due note of.

*“As regards the levy of fixed charges and demand charges, the Commission has explained the rationale for the same several times in its various Tariff Orders. The same is also in accordance with the EA 2003 and the Tariff Policy notified by the Ministry of Power, Government of India. Suffice it to say that levy of fixed charges and demand charges neither result in any windfall gain to the licensees, since they are recovering only a part of the fixed costs through levy of fixed charges, and nor does it result in any tariff shock to the consumers, since Fixed/Demand Charges typically contribute only a small part of the total monthly bill of the consumer. It is for the consumer to assess his demand correctly and accordingly contract for the demand with the licensee, in order to rationalise the demand charges being levied.”*

Accordingly, MSEDCL has proposed the reinstatement of the fixed charges so as to recover the Fixed Costs.

### **Commission's ruling**

The Commission observes that the objectors have objected to MSEDCL's proposal of increase of demand charges by 100%. Regarding the levy of fixed charges and demand charges, the Commission has explained the rationale for the same several times in its various Tariff Orders. The same is also in accordance with the EA 2003 and the Tariff Policy notified by the Ministry of Power, Government of India. Levy of fixed charges and demand charges neither result in any windfall gain to the licensees, since they are recovering only a part of the fixed costs through levy of fixed charges, and nor does it result in any tariff shock to the consumers, since Fixed/Demand Charges typically contribute only a small part of the total monthly bill of the consumer. It is for the consumer to assess his demand correctly and accordingly contract for the demand with the licensee, in order to rationalize the demand charges being levied. In the current Order, the Commission has increased the fixed charges by approximately 25% across all categories based on the increased supply availability reflected in the higher sales growth in FY 2011-12.

## **2.14 Pending Arrears and Collection Efficiency**

Vidyut Urja Equipments Pvt. Ltd (VUEPL) submitted that a majority of the defaulting consumers are subsidised consumers. The objector submitted that in spite of the fact that Government is providing subsidy to agriculture consumers and



power loom consumers, the collection efficiencies of these consumer categories are still poor. The Commission is allowing 1.5% of revenue as provision for bad debts. Many SERCs are not allowing such kind of benefit to their distribution companies. Thus, MSEDCL has to improve on its collection efficiency. VUEPL suggested the provision of bad debt shall be removed, since the collection efficiency is expected to be closer to 100%.

Akhil Bhartiya Grahak Panchayat submitted that MSEDCL should recover the arrears from Government Departments also. Shri Vivek Velankar, Sajag Nagrik Manch submitted that MSEDCL currently has total arrears of Rs. 14,220 crore. This huge amount has not been indicated in executive summary available for public.

Shri Hemant Kapadia submitted that compared to other states the Government of Maharashtra provides higher subsidy to MSEDCL. In spite of this higher subsidy, the arrears from Agriculture consumers have reached Rs. 6000 crore. MSEDCL's recovery from agricultural consumers is very poor.

Shri Kapadia also submitted that though having a monopoly, the bill recovery is hindered due to political influence and MSEDCL is apprehensive of the collection. MSEDCL is also reluctant to disconnect supply of local Government bodies. He alleged that there is lack of co-ordination between legal and technical wing with no protection and support provided to field staff. He stated that legal suits are being filed for recovery even without going into the details and correctness of the account. In most of the cases the documents required by advocates are also not provided leading to delay in proceedings. He stated that though Audited Accounts shows sundry debtor amount as Rs. 13,673 crore, the same is actually Rs. 15,487 crore as per MSEDCL's own submission. Legal expenses are increasing every year but recovery of arrears is not commensurate with the same.

Urja Sahayog, Aurangabad, submitted that the arrears with the Government, Corporation, Municipalities, Zilla Parishads and Gram Panchayat which get clubbed with Government arrears are not shown and hence needs to be provided. By recovering just 15 % of the outstanding arrears would fetch MSEDCL Rs. 2460 crore. This would help MSEDCL to reduce the burden of interest element on working capital and some part of loans. It submitted that detection of theft cases have been reported to be Rs. 7.76 crore in FY 2010-11 and Rs. 10.7 crore in FY 2011-12. Shri N. A. Joshi on behalf of Urja Sahayog submitted that MSEDCL has not provided details of arrears on Govt. connections.

Shri Siddharth Soni objected that though being a defaulter for long, PWW department was waived of its interest on non payment of dues.

Prof. Sham Patil submitted that many customers of MSEDCL have not paid for electricity even for once. He expressed that the collection of funds is as important

as providing electricity to the customers and hence he requested the Commission to direct MSEDCL to make names of such offenders public.

Akhil Bharatiya Grahak Panchayat, Nashik and Shri T. N Agrawal submitted that the size of arrears in the MSEDCL's accounts including Mula Pravara dues is very high and MSEDCL must act on collection of such arrears.

Major Bhagat pointed out that the arrears show that the collection efficiency is low contrary to what MSEDCL has mentioned. He has also submitted that MSEDCL has not taken action against the defaulters under the pretext that the arrears are non-controllable. He suggested that classification of default / arrears shall be made.

Chamber of Small Industries Association (COSIA), NRB Bearings Ltd, Manometer (India) Private Limited, Paper Products Limited, Thane Manufacturers Association and Aplab Limited submitted that though MSEDCL has claimed improved collection efficiency, the Table No. 89 in the Petition of MSEDCL has shown a slight decrease in the overall collection efficiency. In FY 2009-10 it was 98.97% which reduced to 98.58% in FY 2010-11 and now has further reduced to 97.35%, which highlights a declining trend in the collection efficiency. COSIA and NRB Bearing Ltd. urged the Commission to seriously ponder upon the collection efficiency of Agriculture, Temporary connection, Public Water Works and Street Lights in particular. Thus, COSIA submitted that unless there is an improvement in collection efficiency vis-a-vis recovery of the large amount of pending arrears of Rs.16389 crore, no hike in the rates of electricity should be granted by the Commission.

Shri Ravindra Chavan, MLA, suggested that the Tariff hike should not be allowed till pending arrears of electricity are recovered from the consumers in Maharashtra. He highlighted that there is 97-98% acquittal rate in electricity theft cases due to improper prosecution by MSEDCL. It is further worsened by the fact that MSEDCL had been inefficient in recovery of arrears, electricity theft detection and electricity theft prosecution. He also expressed doubts over the roadmap for recovery of arrears presented in the Petition as it is vague and doesn't explain the reasons for inability to recover the remaining 16,389 crore. He suggested that if arrears of Rs. 16,389 crore are recovered then there would be no need of hike.

Urja Prabhodan Kendra observed that on an average, arrears of almost Rs 1200 crore are being added each year since 2005. It expressed concerns over this high figure and argued that this showed total negligence and lack of concern of MSEDCL for recovery of arrears from defaulting consumers.

ABVGP pointed out that even after accumulating huge arrears from few customers; MSEDCL takes stricter action against a consumer defaulting on paying as low as Rs 300. The Mula Pravara and distribution franchisees like M/s Spanco have

arrears to the tune of Rs 150 crore which are pending for a long time and no legal action is being taken on them.

### MSEDCL's reply

MSEDCL presented the category wise arrears position as on March 2012, which is as given below:

Sr. No.	Category	As on	As on
		31.03.2011	31.03.2012
		Rs in crore	Rs in crore
1	Agricultural		
	LT	5889.97	5953.23
	HT	142.79	126.46
	Total-AG	6032.76	6079.69
2	Street Light	240.72	339.78
3	PUB. WATER WORKS		
	LT	498.09	552.56
	HT	991.87	1044.06
	Total-PWW	1489.96	1596.62
4	Powerloom	655.74	4.72
	Sub-Total ( 1 to 4 )	8419.18	8020.81
5	Domestic	713.68	463.87
6	Commercial	222.37	106.88
7	Industrial		
	LT	148.52	49.65
	HT	154.84	95.91
	Total-IND	303.36	145.56
8	Others	49.37	19.65
	Sub-Total ( 5 to 8 )	1288.78	735.96
9	PD Cons.		
	LT	2530.66	2266.54
	HT	912.99	885.84
	Total of P.D. Cons.	3443.65	3152.38
10	TOTAL (Excluding MPECS/TATA/Interstate )	13151.61	11909.15
11	Mula-Pravara	2316.98	2316.98
14	Total	2316.98	2316.98
15	GRAND TOTAL	15468.59	14226.13

MSEDCL also submitted the details of Government department-wise arrears as on 31 March, 2012.

Regarding recovery of arrears, MSEDCL replied that it maintains its Accounts on accrual basis, i.e., income and expenses are recorded as they occur, regardless of whether or not cash has actually changed hands. The financial statements are prepared based on accrual method of accounting in accordance with the generally

accepted accounting principles and the provisions of the Companies Act, 1956 as adopted consistently by MSEDCL. So arrears, if any, automatically reflect in receivables in current assets and recovery of arrears gets adjusted against the same account. Revenue billed irrespective of actual recovery of revenue is considered for ARR and therefore obviously any accrual of arrears or receipt of arrears will not affect the proposed gap. MSEDCL also stated that the detailed Roadmap for Recovery of Arrears is given by MSEDCL in the main Petition.

MSEDCL further stated that the position of receivables of MSEDCL for each year is available in the annual accounts of the Company. The statement of accounts including the Balance Sheet and P&L Accounts of MSEDCL is a public document which is available on the website of MSEDCL. Thus MSEDCL stated that there is no need to publish arrears statement zone wise; category wise and road map for recovery every month, since it will not serve any purpose.

Further, MSEDCL submitted that the collection efficiency is the measurement of how efficiently the billed energy is getting collected. So recovery of arrears will not affect the Collection efficiency.

MSEDCL also replied that the collection efficiency in last two-three years has improved for most of the consumer categories, monthwise collection as compared to the demand. MSEDCL in last two/three years has taken concentrated efforts to ensure that the arrears are not increasing. The current energy bills are being fully recovered from the consumers regularly and hence a declined trend in arrears is observed. Further barring few categories, Collection Efficiency has improved significantly. However, efforts are being done to improve the Collection Efficiency in other categories as well.

MSEDCL also highlighted the general measures taken for recovery of arrears as under:

- a) To issue notices to pay the energy bills;
- b) To disconnect the power supply;
- c) To file a legal suit for recovery of arrears;
- d) To encourage the consumers to pay the arrears by giving various facilities such as payment by easy instalments, waiver of minimum charges, waiver of DPC and concessional interest, etc;
- e) To introduce the concession schemes (wherever necessary) so that it becomes easy for consumers to clear their arrears. Wide publicity is given through available media for such schemes;
- f) To contact consumers personally through local offices and encourage to pay

the bills;and

- g) Regular arrangement of the disconnection drive where an Engineer along with Janmitra and staff from Account section visit the premises and recover payments on the spot by handing over the receipts.

In context of arrears of Government departments, MSEDCL submitted that it cannot disconnect electricity connections of Government departments like other consumers, especially those maintaining essential services, for non-payment of bills. Further, MSEDCL submitted that if the connections to the Government departments get disconnected, the ultimate sufferer would be the common man only as many of the Government departments serve the daily needs of consumers. MSEDCL stated it is not that it doesn't act on Government departments at all. However, MSEDCL officers take action in the matter of Government departments after considering the actual situation. MSEDCL further submitted that the Government departments have their budgetary provisions for various expenses. However, due to various reasons they may not be able to pay the dues on time. However, being Government departments, the liabilities lie with the department and not individual, so the dues.

MSEDCL also expressed that it would be inappropriate to judge the efficiency of the MSEDCL in respect of recovery of arrears by way of comparing the assessment during a particular month and recovery of arrears during that particular month. MSEDCL has been able to recover the amount equivalent to assessment during the respective months, except a few categories like agriculture, rural public water works, etc.

MSEDCL submitted that it has taken the following steps to curb the arrears:

- a) Introduction of photo billing- To reduce manual errors;
- b) Damini Squad- To check the reading taken by private agency;
- c) Reduction of Average Billing, Locked status by taking meters out the rooms;  
and
- d) To reduce the arrears burden on Sarvajani Nal Pani Yojana and to increase the revenue of the MSEDCL, Government of Maharashtra vide Order dated 15 June, 2009 had introduced the "Jeevan Sanjivani Yojana". The said scheme was applicable for Rural Public Water Works.

If a consumer of electricity either neglects or fails to pay the energy bills of the MSEDCL, then the powers have been conferred upon the MSEDCL to disconnect his power supply after giving him a notice of clear 15 day as per Section 56 of Electricity Act 2003. MSEDCL exercises this power for recovery of arrears. MSEDCL expressed that it would not be appropriate to presume that, once the

power supply is disconnected, the dues are received from a defaulting consumer immediately. Moreover, in case of such consumer where power supply plays an important role in maintaining its financial viability (like industrial, agricultural, etc) disconnection of power supply may drastically reduce his payment capacity and then it would be very difficult for the MSEDCL to recover the dues in case his financial status deteriorates beyond a certain limit. In such situations, the consumer's undertaking shall become sick and may close down, and then the only option left with the MSEDCL shall be to initiate legal proceedings for recovery of dues. In the present system, the legal proceedings needs considerable time to conclude and even if MSEDCL succeeds, then also recovery is difficult since by that time nothing is left with the consumers, which could be attached against the MSEDCL's dues.

### **Commission's ruling**

The Commission is of the view that though arrears do not affect the determination of ARR directly, it is important to collect arrears on time to maintain liquidity and reduce the need of working capital. MSEDCL has recently reported serious liquidity problems affecting its working capital and strictures from banks to deny financing of working capital. MSEDCL needs to analyse its accumulated arrears to identify collectible debts from the real bad debts instead of carrying on the burden of arrears on its balance sheet. It is incomprehensible why MSEDCL has not written off substantial portion of the real bad debts in spite of the fact that the Commission has been allowing it 1.5% of ARR as provision for bad debts every year. MSEDCL's submission in respect of the direction given to it for submission of a roadmap for recovery of arrears is also silent on this aspect. MSEDCL is directed to identify all the arrears that in its opinion are not collectible and write them off from the balance sheet utilising the provisions for bad debts allowed to it over the years in its ARR and submit quarterly report to the Commission starting from the quarter ending September 2012.

On the issue of high acquittal rate in theft cases, MSEDCL is directed to submit a report to the Commission on the actual cases of theft registered, number of cases in which fines have been collected and reasons for high acquittal rate, if that is the case, as suggested by one of the objector.

On the claim of MSEDCL of improving collection efficiency, the Commission observes that principal amount of arrears have increased in FY 2011-12 as per the data submitted in the Petition. Any further increase in principle amount of arrears is unacceptable. MSEDCL is directed to ensure that there is no further increase in principal amount of arrears from the current level, by atleast collecting current bills from all the consumers.

On the rationale given by MSEDCL of not disconnecting the power supply for defaulting consumer as it may affect its earning potential and hence hamper the

recovery. Further, the Commission does not find any merit in MSEDCL's contention. If MSEDCL follows such approach, improvement in collection efficiency and recovery of arrears can never be achieved. MSEDCL is directed to take strict action and adhere to protocols in case of default by consumers.

## **2.15 Pending amendments in Regulations**

Shri R. B. Goenka (VIA) submitted that the Commission took up the matter of amending Supply Code & SOP Regulations long back. But the amendment in the Regulation is still pending even after about a year has passed.

Prayas Energy Group and other objectors pointed out that the Standards of Performance Regulations are yet to be notified.

### **MSEDCL's reply**

MSEDCL has not replied to this objection.

### **Commission's ruling**

The present proceedings are under Section 62 of the EA 2003 and only those issues which are directly related to tariff come under the purview of the present proceedings. As a matter of fact, though, the Standards of Performance Regulations are under active consideration of the Commission for finalisation.

## **2.16 Delayed payment charges & prompt payment discount**

Shri R. B. Goenka (VIA) submitted that the prompt payment discount should be increased to 2% instead of 1% currently applicable. He submitted that this is in line with terms of PPA agreement being entered with different generators. The date of payment should be considered from the date of payment by cheque / DD / cash paid by consumer to MSEDCL office. He highlighted that MSEDCL recently issued a circular dated 24 August, 2011 mentioned that the date of payment shall be considered from the date of realization of the amount to MSEDCL account. He submitted that this approach is wrong and is against commercial principles. He requested the Commission to direct MSEDCL to withdraw this circular.

### **MSEDCL's reply**

MSEDCL has not replied to this objection.

### **Commission's ruling**

The Commission is not increasing the prompt payment discount as it is of the view that a discount of 1% is sufficient to encourage consumers to pay their bills before

the due date and within the stipulated time for availing this incentive. Any further increase in rebate will impact the Tariff of other categories.

The issue related to recognizing the date of payment through cheque is a subject matter under consideration by the Commission in a different matter in Case No. 183 of 2011. The Commission will give its ruling in the Order in that Case.

## **2.17 Rebates and Incentives**

Regarding rebate to HT industries during off peak period, Shri R. B. Goenka (VIA) welcomed the MSEDCL's proposal of not changing incentive /rebate / penalties except that the rebate in energy charge to HT industrial consumer shall increase from 85 paise per unit to 250 paise per unit applicable during night hours from 10.00 PM to 6.00 AM.

Regarding the billing demand during off peak period, he supported the MSEDCL proposal that load factor incentives should not be given to the consumers who exceed their demand beyond sanctioned contract demand during night hours. However, he suggested that only day demand should be considered for billing purpose as billing demand; and a penalty should be charged to the consumers exceeding the contract demand even during night hours.

Shri N. Ponrathnam submitted that incentive / disincentive on load factor is an ancient method of having a flat load curve. However, modern method of ToD is much more efficient in demand management. He suggested discontinuing Load Factor Incentive paid to consumers. Also, he suggested that the Demand recorded during off peak hours should not be considered for calculating the Load Factor Incentive. He also suggested waiving the levy of penal demand charges on off peak hours to provide excellent incentive for usage at night.

Mahamumbai Shikshan Sanstha Sanghatna objected to the proposed hike in rebate from 85 paise to 250 paise to the Industries during "off-peak period" i.e. from 10.00 p.m. to 6.00 a.m. It also complained that such a rebate is not made available to its member institutions.

### **MSEDCL's reply**

Regarding Load Factor Incentives, MSEDCL replied that such matters of Tariff categorization and parameters to be considered for evaluation of Load factor come under the purview of the Commission. Thus the issue of maximum percentage rebate/discount (benefit) taken by a consumers exceeding contract demand and availing Load Factor Incentive is not directly related to the present proceedings and hence MSEDCL did not have any specific comments to offer.



MSEDCL stated that though rebate for industrial consumers during off peak period is proposed in the present Petition, providing ToD rebate to all categories of consumers would be difficult at this stage since issues like ToD metering and usage pattern including load curve need to be understood.

Regarding waiving the levy of demand penalty on off peak, MSEDCL replied that as per the prevailing provisions, the Demand recorded by a High Tension consumer during night hours is ignored for billing purpose, even though the same exceeds his Contract Demand. Further such consumer, who has exceeded his Contract Demand during night hours, is otherwise considered as eligible for Load Factor Incentive. It has been observed that the consumers are taking undue advantage of such provision and are getting benefited by paying marginal penalty for exceeding Contract Demand against substantial quantum of Load Factor Incentive. In the present Petition, MSEDCL has proposed to enhance the off peak consumption rebate to 250 paise per unit from existing 85 paise per unit to Industrial Consumers. It is expected that every High Tension Industrial consumer would attempt to get maximum benefit of the proposed provision. In case the present provision of "Billing Demand" is continued as it is, then the High Tension Industrial consumer may be tempted to purposely exceed his Contract Demand during night hours to ensure maximum consumption during night hours and in the process will be benefited in Load Factor Incentive. In view of this situation, MSEDCL proposed to the Commission that it may consider modifying the present provision in respect of "Billing Demand" and may consider including Demand recorded during off peak hours also for billing purpose. Further, MSEDCL has averred that such consumers who have exceeded Contract Demand during night hours should not be considered as eligible for "Load Factor Incentive".

### **Commission's ruling**

The Commission finds no merit in MSEDCL's view considering irrelevance of the issue of maximum percentage rebate/discount (benefit) taken by a consumers exceeding contract demand and availing Load Factor Incentive. The present proceedings are in the matter of Tariff determination of MSEDCL, and rebates are integral part of Tariff. Therefore, MSEDCL's contention is incorrect.

The Commission has examined the suggestions and objections submitted by different stakeholders. In view of the Commission, the proposed change in rebate in off peak hours from 85 paise to 250 paise may not materially affect any change in the load curve of MSEDCL as over the years the consumers have had already largely adjusted their load pattern to align with the ToD rebates. Increase in the rebates will not have much impact on load shift. Also, the high rate of rebate proposed will surely have a large impact on the energy charges of other consumers who are not eligible for ToD facility. The Commission has further dealt with the issue in the section of the Order dealing with Tariff Philosophy.

As a general principle the Commission has retained all incentives allowed in the existing Tariff Schedule and also the methodology of computation of Billing Demand, as the Commission did not find any good reason to alter the existing principles.

## **2.18 Transmission Charges Paid To MSETCL**

Shri R. B. Goenka (VIA) submitted that the transmission charges paid to MSETCL should be reduced by the amount equivalent to transmission charges being paid by open access consumers / generators directly to the Transmission licensee/ SLDC. The Commission had decided the transmission charges in terms of Rs per kWh. However, the amount is collected by SLDC at the time of providing open access in terms of MW of open access. He highlighted that SLDC had collected a huge extra amount from the consumers and generator opting open access for transmission /wheeling of their power through grid. The amount should be collected based on actual kWh transmitted / wheeled. He requested the Commission to direct SLDC to refund such extra amount collected on one to one basis to the open access users and direct MSETCL to refund the amount collected from open access user as transmission charges to MSEDCL since MSEDCL has paid annual transmission charges for transmission of such power. He highlighted that SLDC had also been collecting transmission charges from the generators who are selling power to MSEDCL. He suggested that this amount should be refunded to the generators since MSEDCL is making this payment to MSETCL and there is a double recovery of the amount.

### **MSEDCL's reply**

MSEDCL has not replied to this objection.

### **Commission's ruling**

The present proceedings are under Section 62 of the EA 2003 and only the issues directly related to tariff come under the purview. The objector may raise the issue regarding basis of collection of open access charge/double charging of open access charges separately with the Commission. The revenue from open access charges is considered as Non-Tariff Income while arriving at the net ARR of the transmission licensees.

## **2.19 Provision for refund of balance RLC amount**

Shri R. B. Goenka (VIA) submitted that MSEDCL has not made any provision for Refund of RLC amount and hence it should be directed to make a provision for the refund. He submitted that MSEDCL is currently charging back the RLC refund amount in the ARR instead of giving from its own finances. The mechanism of RLC was to encourage MSEDCL to reduce losses and make it accountable to

reduce the losses. However, including it in the ARR would not ensure accountability on the licensee to reduce losses. He also highlighted that despite achieving loss reduction more than target; the utility has proposed to take away such profits instead of adjusting into the RLC amount. Therefore, he requested the Commission to utilise contingency reserves and profits of MSEDCL to refund the RLC amounts instead of passing everything to subsidised consumers. He also highlighted that in recent Order, the Hon'ble ATE had directed MSEDCL to give interest on RLC to the consumer. Though the Commission had decided the rate of interest on such refund, MSEDCL failed to make any provision for such payment.

Vidyut Urja Equipments Pvt. Ltd pointed out that, in the Petition, MSEDCL proposed to suspend payment of RLC amount which is not acceptable and hence requested the Commission to quash the same.

Jayant Mutha submitted that many people did not receive the refund of RLC as per the declaration of MSEDCL. He has requested MSEDCL to provide the number of applicants and the people who have received the same.

Shri T. N. Agrawal submitted that a provision needs to be made for refund of Rs. 500 crore refunded proportionately to consumers.

Central Railways submitted that the Commission vide its Order in Case No. 144 of 2008 dated 9 September 2009 had ordered refund of Rs. 592 crore by MSEDCL towards Additional supply charge (ASC) in which Rs. 36.78 crore were to be refunded to Railways. As per the current Petition, MSEDCL stated that it has refunded Rs. 687 crore. However, the actual refund to Railways has only been Rs. 4.04 crore and Rs. 32.74 crore are yet to be refunded. Therefore, Central Railways requested the Commission to direct MSEDCL for refund of balance amount of Rs. 32.74 crore. Regarding RLC refund, Central Railways submitted that MSEDCL is yet to refund remaining RLC of Rs. 1293 crore and expressed concerns over lack of provisioning made by MSEDCL for the same. Hence, it requested the Commission to make provision for RLC refund.

SAIL submitted that as per the Commission's Order in Case No. 54 of 2005, repayment of RLC should be linked to the loss reduction trajectory. Thus it requested the Commission to direct MSEDCL to follow distribution loss reduction trajectory. It suggested that RLC refund may be continued since MSEDCL is achieving loss reduction target as decided by the Commission. Thus, SAIL requested the Commission to continue the refund of RLC to protect the interest of HT consumers.

Shri Ravindra Chavan, MLA, submitted that the RLC Refund is a case of cheating as the reliability charges recovered from some consumers would be borne by all the consumers in Maharashtra. He objected that such a submission of MSEDCL is not acceptable as the issue of RLC refund being pending before the Hon'ble Supreme

Court of India. He stressed upon the need to have an inspection to check if the consumers who were levied reliability charges were refunded RLC charges along with interest as specified by the Commission, from time to time.

Shri Vasant Shah submitted that live consumers are getting refund of RLC. However permanently disconnected consumers are deprived of the same. He requested that balance refund of RLC amount to the PD consumers should be made in one installment.

### **MSEDCL's reply**

MSEDCL submitted that the Commission has introduced Regulatory Liability Charge vide its Tariff Order of December, 2003. The refund of the same through tariff mechanism has started from June, 2008, which was pursuant to the decision of the Hon'ble ATE and the subsequent decision of MERC. The Hon'ble ATE prima-facie accepted the contention of MSEDCL and had directed MERC to review / reconsider its decision. As directed by the Commission, MSEDCL has refunded an amount of Rs. 521 crore (including Bhiwandi DF) for the FY 2010-11 and has estimated an amount of Rs.443 crore for the year of 2011-12.

MSEDCL stated that last two years have seen wide increase in the rates of primary fuel and hence there has been increase in the power purchase cost. That increase has resulted in higher tariff for the consumers since almost 80% for the ARR pertained to power purchase cost and transmission cost. As decided by the Commission, RLC refund has to be catered through the tariff mechanism and as such the same needs to be recovered from consumers, which is then subsequently refunded to select group of consumers namely Commercial and Industrial, which are both subsidizing categories.

MSEDCL submitted that in view of the reasons mentioned in foregoing paragraphs and the necessity of reducing the impact of tariff, it has not projected any RLC refund for FY 2012-13. It added that it has not proposed any provision for RLC refund for FY 2012-13 and hence has not proposed any changes in the Tariff Petition due to RLC Refund. Considering the amount of ARR, MSEDCL has further requested the Commission to defer the RLC Refund for FY 2012-13.

Regarding the refund of ASC and RLC Charge to Central Railways, MSEDCL replied that it has taken the note of suggestion and it is being informed to the concerned department of MSEDCL for appropriate action, if necessary.

### **Commission's ruling**

Although MSEDCL has not proposed any RLC refund expense for FY 2012-13, the Commission has made a provision for Rs. 500 crore in ARR for FY 2012-13 for RLC refund. The Commission noted that as per the submission by MSEDCL dated 6 March, 2012 in Case No. 182 of 2011, the total outstanding balance of RLC

refund for PD consumers was Rs. 166 crores. The Commission is of the view that since PD consumers are no longer connected to the MSEDCL network, the entire outstanding RLC amount should be refunded back to these consumers. Thus, the Commission has also made a provision for an additional amount of Rs. 166 crore for entirely refunding the RLC amount to PD consumers. As per the principles adopted by the Commission in its Orders dated 2 April, 2008 in Case No. 49 and 92 of 2007, the RLC refund needs to be recovered from the ARR. On the issue of interest payment on RLC, the matter is sub judice before the Hon'ble Supreme Court in Civil Appeal No. 2286 of 2012. Therefore, it is not appropriate for the Commission to comment on the same.

## **2.20 Excess recovery from ZLS areas which is not refunded to consumers**

Shri R. B. Goenka (VIA) had asked a query to MSEDCL regarding ZLS area account. He had demanded that the excess recovery amount from consumers of ZLS area is to be separately indicated and asked for clarification whether this amount is kept in a separate account. In the reply, MSEDCL responded that the reliability charges charged to consumers of beneficiary area is on the basis of consumption. A quarterly audited reconciled statement is prepared which specifies separately the cost incurred on power procurement for the ZLS area and the revenue billed. The ZLS area account reconciliation statements duly audited by a third party Chartered Accountant for the period from April 2009 to March 2010 have already been submitted to the Hon'ble Commission and reconciliation statements for Revenue Head-Quarters of MSEDCL have also been displayed on the website of MSEDCL. From the reply of MSEDCL, he concluded that it was evident that MSEDCL collected large extra amount and did not reconcile and submit the quarterly audit report, since it has a knowledge that the amount collected is to be refunded to the ZLS areas. He expressed concerns over MSEDCL not refunding the excess amount collected in spite of the fact that power procurement cost has reduced and any variation was to be passed on to the consumers of ZLS areas.

He submitted that an amount of Rs. 35.9 crore is to be refunded to Nagpur Urban Consumers. This was an over recovery in tariff over and above the tariff decided by the Commission and hence sought refund of this amount with interest as per section 62 (6) of EA 2003. He requested the Commission to direct MSEDCL through the tariff order to refund this amount to the consumers of Nagpur and make provision in ARR, if necessary.

### **MSEDCL's reply**

MSEDCL has not replied to this objection.

### **Commission's ruling**

The Commission directs MSEDCL to submit the reconciliation statement of ZLS account within 30 days from issuance of this Order. MSEDCL is also directed to reimburse the entire excess recovery of ZLS scheme within three months from the issue of this Order.

## **2.21 Penalties imposed by Forums & other Authorities**

Shri R. B. Goenka (VIA) had asked MSEDCL to clarify whether A&G expenses and other miscellaneous expenses included penalties imposed by different Forums / Authorities on MSEDCL and asked to submit the details of the same. To this query, MSEDCL replied that as per the present accounting practice followed by the Company, if any penalty is imposed by any Forum/Authority, the same is accounted for as miscellaneous expenses under A&G expenses. Due to vast scale of operations of MSEDCL, it is difficult to identify the penalty amount and the details of such penalties at each such Circles and divisions. Based on the reply of MSEDCL, he expressed that it is evident that the penalty imposed by different Forums on MSEDCL is being loaded in the expenses account of MSEDCL. He stated that this issue should not be taken lightly since this liability has arisen due to the inefficiency of the concerned officer of MSEDCL. He submitted that such liabilities should not be loaded in expenditure account of MSEDCL and should be deducted from the salary of responsible officers.

### **MSEDCL's reply**

MSEDCL has not replied to this objection.

### **Commission's ruling**

The Commission does not allow any increase in A&G expenses over and above the approved A&G expenses in the ARR, which are based on inflationary indexation, unless such expenses are proven to be uncontrollable for MSEDCL. Accordingly, in case of excess A&G expenditure, the consumers only have to bear one-third of such increase in A&G expenses as per the mechanism for sharing of gains and losses as per the Tariff Regulations, 2005.

## **2.22 Interim relief application (Miscellaneous Application 2 of 2012 in Case No. 19 of 2012)**

Dr. Ashok Pendse submitted that the last three ARR Petitions submitted by MSEDCL have been accompanied by a Petition for interim relief due to high bank borrowings and cash flow problems. He observed that MSEDCL should not have any cash flow problem if it is able to recover its arrears in time. He observed that the accumulated arrears only on account of Agriculture, PWW, Mula Pravara and permanently disconnected consumers is more than Rs. 12,000 crore, which is 76%

of MSEDCL's total arrears. He urged that MSEDCL should be more proactive in collecting arrears rather than submitting interim relief Petitions.

Shri R. B. Goenka (VIA) submitted that instead of safe guarding the interest of consumers, as is provided in Section 61 of the Act, the Commission has safeguarded the interest of the licensee as is seen from the past tariff orders and interim reliefs provided to MSEDCL in which the Commission always allowed excess expenses, incurred by the licensee during True up for past periods. Most of these expenses were controllable expenses and it was pointed out by VIA and other consumer representative that such expenses should not be allowed in the ARR. However, after proper scrutiny, 1/3rd of controllable expenses may be allowed in case the licensee has undertaken some efficiency improvement by incurring such excess expenses as per the provisions of Section 61 (e) of the EA 2003.

He objected that, in the past, the Commission has always allowed extra expenditure incurred by the licensee. Whenever the expenditure was not allowed, the Licensee challenged the Commission's Order in the Hon'ble ATE and got the Order in its favour resulting in increase in tariffs. He highlighted that the Order of the Commission in Case No. 100 has similar interim application under Section 94 (2) of EA 2003 which is subjudice and the appeal is pending with Hon'ble ATE and hence the Commission should not entertain the current application for interim relief of Rs. 3037 crore, in these circumstances.

Shri Pratap Hogade submitted that the revenue estimated by MSEDCL for FY 2011-12 and FY 2012-13 is inaccurate and is lower than the audited revenue. Therefore, he stated that there is no need consider any interim relief as applied by MSEDCL vide Misc Application no. 2 of 2012 in Case No. of 19 of 2012. Prayas Energy group too opposed the interim relief application of MSEDCL.

Shri Hemant Kapadia objected to MSEDCL's Petition for interim relief and requested to reject the application. Shri Hemant Kapadia submitted that as per provisions of Tariff Regulations, 2005, MSEDCL should have filed its Tariff Petition by the month of November. However, MSEDCL was not able to adhere to this timeline and thereafter by raising the issue of financial vulnerability requesting for interim relief. Though the Commission has also allowed it once but it is prayed that hereafter the Commission should not allow such request. Shri Prasad Kokil submitted that instead of implementing Multi Year Tariff framework and stability in electricity tariff, the consumers are forced to face 6 times tariff hike in last 21 months.

### **MSEDCL's reply**

MSEDCL submitted that the interim relief was sought last year and current year due to precarious financial position of MSEDCL. MSEDCL also submitted that it had made a presentation about the interim relief during the proceeding of public

hearings. MSEDCL submitted that it was carried out based on the direction of the Commission and was discussed in the open forum at the time of public hearing with the amount estimated as interim relief and the reasons thereof. MSEDCL submitted that the interim relief sought in Case no. 100 of 2011 and in Case no. 19 of 2012 is only for such amount which have already been approved by the Commission or by the Hon'ble ATE against the order passed subsequent to the earlier orders.

It is submitted that on a timely basis, orders are issued by the Commission or Hon'ble ATE in relation to allowing of past cost or cost under review of MSEDCL / MSPGCL or MSETCL. Once such Order is passed, the liability for the payment of such cost arises at the same point of time whereas many of the orders do not clarify the procedure for recovery of such cost resulting in time mismatch between the occurrence of the cost and the recovery of such cost. The same is then funded by MSEDCL through their working capital loan, the interest of which is disallowed totally by the Commission in last several years due to normative clause as per Tariff Regulations, 2005. MSEDCL submitted that due to high increase in cost related to power procurement and operational activities and imbalanced tariff hike as compared to increase in cost, it is already in a position whereby they are just able to meet their financial ends. The additional cost liabilities due to such orders or review orders result into additional financial liability which makes the financial situation more precarious as there is no way of recovery of the same specified in the Order. Therefore, MSEDCL submitted that in order to survive in such situation and to meet the financial obligation, MSEDCL has sought the interim relief in line with provisions of section 94 (2) of the Electricity Act 2003, as the tariff order and recovery of such tariff after the tariff order is not likely to conclude before September 2012.

MSEDCL submitted that the impact of interim relief as such on the consumers will not be treated as additional but only to be considered as a way of recovery of part of the tariff hike earlier than the time when the tariff order is issued. MSEDCL submitted that interim relief is not going to impact as an additional tariff for the consumers but only the part of the tariff is recovered earlier to tariff order issued to safeguard the financial position of MSEDCL as well as the other stakeholders whose liabilities has been arisen but are not able to be discharged due to lack of funds. Therefore, MSEDCL submitted that in order to sustain operations and to survive, it is necessary that such interim relief is required to be provided which will be considered as win-win situation for MSEDCL, Creditors and Consumers.

### **Commission's ruling**

MSEDCL submitted a Miscellaneous Application in Case No. 19 of 2012, for interim relief on 26 June 2012. In the said application MSEDCL had prayed as follows:



“.....

*b) To pass an interim order without any delay permitting MSEDCL to recover at least Rs. 3,037 Crs. and assist the Applicant to financially sustain its activities by way of imposition of an additional charge as proposed in the annexure to this petition with immediate effect;.....”*

The Commission heard MSEDCL in this matter on 9 July, 2012 and admitted the application. However, as the Public Hearings in Case No. 19 of 2012 were scheduled to start from 11 July, 2012, the Commission directed MSEDCL to present its application for interim relief before the general public at large during the Public Hearings. Accordingly, MSEDCL included its submissions in this regard in its presentations made in the Public Hearings in Case No. 19 of 2012.

However, in view of the fact that the Commission is disposing off the main Petition of MSEDCL through this Order, the interim relief application of MSEDCL becomes infructuous. Accordingly the Miscellaneous Application No. 2 of 2012 in Case 19 of 2012 is disposed off as infructuous.

### **2.23 Inclusion of legal fees of consumer representative in the ARR**

Vidyut Urja Equipments Pvt. Ltd and Shri Hemant Kapadia submitted that the legal expenses of MSEDCL are included in ARR, thus recovered from consumers who are the litigants in most cases in the first place. They have suggested to the Commission to separate a corpus which shall be consumed by consumer representatives for the same.

#### **MSEDCL's reply**

MSEDCL submitted that its legal charges and audit fees were just 0.03% of the total ARR. MSEDCL further stated that it cannot be said that all the legal expenses were related to MSEDCL's matters before the Hon'ble ATE and the Hon'ble Supreme Court. MSEDCL filed the appeal against MERC's selected Orders only where it felt that it has an edge or chances of winning. MSEDCL further stated that it is within its rights to prefer appeals against the Commission's Order as per the provisions of the Act

MSEDCL submitted that it strongly object the funding arrangement to the consumer representatives by the Commission. Funding may be provided to the consumer representatives by the respective concerned departments of the State Govt., e.g., An association/person representing interests of agricultural sector may be provided suitable funds by the Department of Agriculture. Direct financing with discretionary powers bestowed upon the Commission may lead to a situation wherein financial assistance may be denied to consumer representatives to

approach the Hon'ble ATE, the Hon'ble Supreme Court, etc. contesting the Order passed by the Commission.

### **Commission's ruling**

The Commission is of the view that taking legal recourse for various matters is a right of MSEDCL and according to the provisions of the extant regulations these are legitimate expenses. However, it appears that there may not be any provision in law under which the consumer representatives could be allowed to claim legal expenses through MSEDCL's ARR.

#### **2.24 Administrative and operative expenses**

Dada Patil Vaidya alleged that the ineffective management of MSEDCL is a prime reason for the rise in Tariff due to unnecessary expenditure and the same needs to be checked.

Mahamumbai Shikshan Sanstha Sanghatna and Shri S. R. Nargolkar submitted that the operation and maintenance expenses seemed to be inflated unreasonably. It also observed that the employee expenses also appeared to be highly inflated resulting in an unrealistic gap in the revenue requirement. It suggested a proper audit into the accounts of MSEDCL and called for the rationalization of the costs to bring down the extra-ordinarily high Tariff structure.

Shri Ravindra Chavan, MLA, submitted that the Operation and Maintenance Expenses proposed by MSEDCL of Rs.3893 crore, Administration and General Expenses of Rs. 442 crore and Depreciation and advance against depreciation of Rs.1309 should not be allowed. He questioned the need for the provision of bad debts when the expenses specified in the Petition are allowed by the Commission and hence he suggested that the bad debts of 761 crore should not be allowed. He also submitted that other expenses of 11 crore should not be allowed as it is not explained and justified.

Urja Prabodhan Kendra submitted that MSEDCL's Employee expenses are higher by Rs 152 crore for the FY 2010-11 and Rs 438 crore for FY 2011-12 with respect to earlier year which appears very high (21.39% higher). It highlighted that these would add to the burden of the consumers. Additionally, it submitted that the guidelines given by the Commission have not been adhered to.

Urja Prabodhan Kendra also submitted that the administration expenses have suddenly increased from Rs 232 crore (FY 2010-11) audited figure to Rs 387 crore estimated for the FY 2011-12. It also expressed that MSEDCL has no mechanism and no desire to control the administration and general expenses. It also expressed that unbundling of old MSEB in three companies has increased the otherwise uncontrollable expenses of employees and general administration expenses.

**MSEDCL's reply**

MSEDCL replied that as compared to the increase in Sales, the increase in O&M Expenses is nominal. MSEDCL distributes electricity in the largest geographical area in India as compared to other Distribution Utilities. Considering the large geographical spread, huge Distribution Network, no. of Employees, the O&M Expenses of MSEDCL are bound to increase. MSEDCL has already given the detailed reasoning as well as methodology adopted to project the O&M Expenses in the Main Petition. MSEDCL also submitted that the O&M expenses appear to be increased because the base figures approved by the Commission are generally determined on the lower side and are approved based on the increase in Consumer Price Index (CPI) and wholesale Price Index (WPI). MSEDCL has challenged the Methodology of the Commission before the Hon'ble ATE and the said Appeal is pending.

Regarding Employee Expenses, MSEDCL replied that the dearness allowance given to MSEDCL employees is based on the DA declared by State Government which in turn depends on DA declared by Central Government depending on the All India Consumer Price Index Numbers.

Regarding the number of Employee expected to be added, MSEDCL replied that it is not planning to add any new employee in FY 2011-12 and FY 2012-13. However, vacant positions against the sanctioned posts would be filled in and vacancies arising due to retirements would also be filled.

Regarding A&G Expenses, MSEDCL replied that the A&G Expenses are duly audited by the Statutory Auditors of the MSEDCL which is legitimate and genuine and are directly related to the day to day administration and general operations of MSEDCL. MSEDCL has projected the A&G Expenses with a nominal increase of 10 % per annum (for maximum heads of A&G Expense) over previous year considering the present trend of inflation. Further details have been provided in the main Petition.

**Commission's ruling**

The Commission has a specific methodology guided by the Tariff Regulations, 2005 for approving the Administrative and General expense for the ARR and Tariff determination. The Commission has been guided by the same methodology for approval of Administrative and General Expense for the current Petition of ARR and Tariff determination. However, during the True up process, the Commission will consider the deviation in the actual and approved Administrative and General Expense and accordingly perform prudence check in allowing/disallowing the deviations.

**2.25 Maintenance of Distribution Network**

Ansari Momin Julaha Powerloom Conference submitted that the infrastructure scheme to be implemented in Malegaon has been proceeding at a very slow rate and the same should be carried out at a faster pace. They also protested the lack of express feeders in Malegaon.

### **MSEDCL's reply**

MSEDCL replied that the issue highlighted by the consumer are local in nature and hence requested the consumer to approach the concerned office of MSEDCL for redressal.

### **Commission's ruling**

MSEDCL's reply is not satisfactory. MSEDCL is directed to provide a status report to the Commission regarding progress of the implementation of Infrastructure Plan in Malegaon area along with reasons for delay in implementation. The report may be submitted within sixty days from the date of this Order.

## **2.26 Cold Storage systems**

Shri Anand Cold Storage and Agro Products submitted that the Commission, in various Orders, has tried to include the section of cold storage in the Agricultural sub section. However, MSEDCL has consistently tried to deny the benefits of the encouraging policy to cold storage unit, initially under the pretext of ownership and now with respect to the material stored. MSEDCL has proposed applicability under "Perishable agriculture produce in its natural form ". In case of numerous items, there are simple post harvesting processes that are required by for the produce and such processes are carried out by the farmers. Hence, Shri Anand Cold Storage and Agro Products have suggested that the proposed word "in its natural form" should be edited as "in its natural form or in the processed storage eligible form".

Ripening And Cold-Chain People and Navi Mumbai Cold Storage Owners Welfare Association submitted that MSEDCL itself had proposed in its APR Petition of FY 2008-09 in Case No. 116 of 2008 that the LT pre-cooling and cold storages should be provided supply under LT IV - LT Agricultural category. The Commission in its Tariff Order dated 17 August, 2009 had accepted the suggestion and made applicable LT-Agriculture Tariff to pre-cooling and cold storage units. The Commission in its Tariff Order dated 12 September, 2010 in Case No. 111 of 2009, had also clarified and added the words in the Tariff applicability, both in LT & HT category, as "*Irrespective of whether pre-cooling and cold storages are being used by farmers or traders and irrespective of ownership pattern.*". In spite of the clarification by the Commission as stated above, MSEDCL vide its commercial circular No. 124 dated 14 October, 2010 (i.e. after the Tariff order) added its own condition in the Tariff applicability as "*... applicability is extended only to the cold storage of unprocessed agricultural produce only*". On the basis of the circular, the

Association objected that MSEDCL authorities have tried to deny the Agriculture Tariff applicability to the pre-cooling and cold storage units storing Agricultural products such as Raisins (Manuka or Bedana), Turmeric, Tamarind, Coriander, etc. The Tariff applicability "*for storing perishable Agricultural produce in its natural form*" is totally discriminatory and unjustifiable. It highlighted that Pre-cooling and cold storage units are being used for all types of Agricultural Products. Some products are being kept in its natural form, e.g., fruits and vegetables. However, some products are being kept in the processed form, e.g., Dry grapes, Raisins (Kismis, Manuka, Bedana) Turmeric, Tamarind, Coriander, etc. The Association expressed concerns that these agricultural products cannot be stored in its natural form. All these products are being processed by the farmers in their own farms.

Hence, considering the above factors, the association requested the Commission that MSEDCL's proposed new proviso should be rejected; and Agriculture Tariff should be made applicable for storing of all agricultural products, either in the natural form or in the farm- processed storage eligible form. It also suggested that the Commission may put the condition, that no engineering or industrial or processing activity should be carried out in the pre cooling and cold storage units; and if such activity is carried out, then the industrial Tariff would be applicable to such units.

#### **MSEDCL's reply**

Regarding the Tariff for Cold Storages, MSEDCL replied that it has examined various issues regarding the classification of consumer litigations arising due to wrong categorization. Based on the feedback received during interaction with field officers, MSEDCL has proposed applicability of Tariff to different category of consumer in exhaustive manner. Further MSEDCL stated that as per Section 62 of the Electricity Act, 2003, the State Commission may differentiate the Tariff according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. Hence the powers to decide the Tariff category vests with the Commission.

#### **Commission's ruling**

The Commission observed that MSEDCL has not sufficiently explained the reason for its proposal to restrict the cold storage Tariff only to "perishable agriculture produce in its natural form". Also, it has not responded to the objections raised by different consumers in this respect. Therefore, the Commission is of the view that there is not enough reason to exclude a section of consumers from the presently applicable definition of Agriculture Tariff. Therefore, the Commission has not approved the proposal of MSEDCL to restrict the cold storage Tariff only to

“perishable agriculture produce in its natural form” and has maintained the existing applicability provisions.

## **2.27 Special Concession for Nasik region Consumers**

Milind Chincholikar from NIMA submitted that Nashik has less distribution losses and it has been consistently reducing. Hence, he advocated incentives to be given to revenue head quarter.

### **MSEDCL’s reply**

MSEDCL replied that regarding the request of segregation according to geographical position, the Commission had opined the following in the Order against Petition for APR for FY 2008-09 & Tariff determination for FY 2009-10:

*“... if the logic of location of resources is extended further, then Western Maharashtra may well say that hydro resources are located in their part of the State, and a major part of the revenue is coming from Western Maharashtra, hence, they should get preferential treatment. The Commission has to however, consider the State and MSEDCL’s licence area as a whole, for determining Tariffs.”*

Hence, MSEDCL has maintained that it shall go by the Commission’s guidance.

### **Commission’s ruling**

The Commission is of the view that under the present circumstances prevailing in the State of Maharashtra, it would not be prudent to apply different Tariffs to the consumers of different regions. As has been quoted by MSEDCL correctly, the Commission has already explained the reasons in the Order in Case No. 116 of 2008 for APR for FY 2008-09 & Tariff determination for FY 2009-10.

## **2.28 Electricity Duty**

Ansari, Momin, Julaha Powerloom Conference alleged that the electricity duty of 150 paise/unit is being levied by MSEDCL to prevent Open Access from Captive Power Producers as it is available at cheaper rate.

### **MSEDCL’s reply**

MSEDCL replied that the Electricity duty is decided by the Government of Maharashtra. The entire electricity duty charged to the consumer is passed on to the State Government and MSEDCL does not earn any profits out of the transaction. Hence, MSEDCL does not have to offer any comments on the issue of levy of Electricity Duty.

**Commission's ruling**

The Commission agrees with the submissions of MSEDCL as Electricity Duty is solely decided by the State Government.

**2.29 Pilot Project and inadequate staff**

Shri Anantrao Gudhe, Ex MP, objected on selecting Amravati for implementing Pilot scheme of new staffing pattern. Shri Munna Rathod and Shri Vijay Nagpure requested to implement old staffing pattern instead of new pilot scheme in Amravati. Shri Kiran Paturkar submitted that in Pilot scheme, Officers of MSEDCL are heavily loaded, which is resulting in poor service to the consumers. He submitted that improvement/ revision in staffing pattern should be done for improving quality of service. But due to new staffing pattern being implemented as Pilot Project in Amravati, the consumers have to approach separate Officer for each problem which increases hardship of the consumers.

Shri Anantrao Gudhe, Ex MP, also requested the Commission to issue direction to MSEDCL for immediate filling up of vacant posts in Amravati. Shri Pramod Pande and others submitted that inadequate staff in Amravati Zone has resulted into poor quality of supply and improper services to the consumers and requested the Commission to direct MSEDCL to increase the staff strength and improve the services.

**MSEDCL's reply**

During the hearing in Amravati, MSEDCL submitted that Pilot project for new staffing pattern is being implemented in one Division of each Zone of MSEDCL. Amravati Division in Amravati Zone is the Revenue Divisional Headquarter. Therefore, Amravati selected for implementing this Pilot project. There are some initial problems being faced in the process of implementing this Pilot Project, but MSEDCL is trying to overcome these difficulties and will provide good services to its consumers.

**Commission's ruling**

The Commission is of the view that notwithstanding the pilot implementation of any project, MSEDCL shall not compromise its service obligations towards the consumers. Therefore, the Commission directs MSEDCL to immediately address the problems raised by the objector.

**2.30 Suggestions / Awareness Programs**

Shri Ashish Chandarana submitted that there should be public awareness programs for the consumers regarding their rights and the consumer should also be made

aware of the remedies available for consumer grievances and as per MERC (Consumer Grievance Redressal Forum & Electricity Ombudsman) Regulations, 2006 in the State. He further stated that the District Committee setup under Section 166 (5) of EA, 2003 should work under the guidance of MERC.

### **MSEDCL's reply**

MSEDCL has taken the note of the suggestions made by the consumer; and, if necessary and feasible, appropriate action will be taken in this regard.

### **Commission's ruling**

The Commission is of the view that it is in the interest of the licensee to establish better communication with the consumers through consumer education on various aspects of the electricity supply to them. The Commission is of the view that the suggestion made is a positive step towards such initiatives, and MSEDCL needs to take appropriate action in this matter.

## **2.31 Timing of Public Hearings/Advertising**

Shri Anandrao Aadsul, MP submitted that Public Representatives are aware of the difficulties faced by the consumers and they can effectively represent the same before the Commission. Therefore, presence of Public Representatives for the Public Hearings is of vital importance. The Commission should not have scheduled these Public Hearings during the period when Monsoon Session of Maharashtra Assembly is going on.

Shri Gudhe, Ex MP, & Others submitted that the Tariff Petition should be published in local newspapers and information on energy bills regarding Public Hearings should be printed so that there is wide awareness about Public Hearing. Similarly, the Public Notice should also be displayed on the Notice Board on MSEDCL Offices so that Public at large become aware about the Public Hearing process.

### **MSEDCL Submission**

MSEDCL did not reply to this objection

### **Commission's ruling:**

The Commission ensures due regulatory process as enumerated in the Electricity Act, 2003, the Commission's Tariff Regulations and Conduct of Business Regulations. Accordingly, the Commission had advised MSEDCL to issue a Public Notice in leading newspapers both in Marathi and English, which are widely circulated in the State. Accordingly, it is ensured that public at large is informed about the proceedings. Also, the licensees put up their application on their



respective websites for general access by any interested person. The Commission also ensures that a copy of the Public Notice is uploaded on the Commission's website for access by any interested person. Therefore, due care is taken for wide publication of the information on Public Hearings conducted by the Commission.

However, the timing of conducting is usually determined based on the time the Commission receives and admits a Petition received from a licensee. The timing of the hearings are governed by the Commissions Conduct of Business Regulation, which specifies that a minimum of twenty one (21) days are allowed to the general public for responding to the Petition filed by a licensee.

### 3. TRUING UP FOR FY 2010-11

MSEDCL, in its Petition in Case No. 19 of 2012, sought approval for Final Truing up of expenditure and revenue for FY 2010-11 based on the actual expenditure and revenue for FY 2010-11 as per the Audited Accounts. In this Section, the Commission has analysed all the elements of actual revenue and expenses for FY 2010-11, and has undertaken the Truing up of expenses and revenue after due prudence check. Further, for FY 2010-11, the Commission has approved the sharing of gains and losses between MSEDCL and the consumers on account of controllable factors, in accordance with Regulation 19 of the Tariff Regulations, 2005.

#### 3.1 Sales for FY 2010-11

- 3.1.1 MSEDCL submitted that during FY 2010-11 total sales in its licensed area of supply were 71,280 MUs including energy sold to consumers in Bhiwandi franchisee area and for ZLS. It also submitted month-wise category-wise break-up of sales for its entire licensed area. However, it submitted that if sales to Bhiwandi franchisee is considered at input level then the total sales would be 71,469 MUs.
- 3.1.2 The Commission verified that MSEDCL's statutory auditors also have reported total sales at 71,280 MUs in the notes to MSEDCL's Audited Accounts.
- 3.1.3 In the present Petition MSEDCL submitted that index of unmetered agricultural consumption is determined based on consumption recorded by metered agricultural consumers who have normal progressive status of meter reading, i.e. excluding meters with zero or negative consumption.
- 3.1.4 For the metered consumer, the maximum consumption was capped at 224 kWh/HP/month based on a maximum of 10 hours of supply per day and 300 days of operation per annum.
- 3.1.5 The Commission had observed in the Order in Case No. 100 of 2011 that the reported sales for FY 2010-11 were very high though the specific consumption showed a trend similar to FY 2007-08 and FY 2008-09. The Commission observed that all new unmetered agricultural connections in FY 2010-11, could not have been released at the beginning of the year. Responding to the above observation MSEDCL submitted in the present Petition that it did not consider release of all new agricultural connections at the beginning of the year. Total new unmetered connection released in FY 2010-11 was reported to be 1,27,491 with connected load of 13,11,173 HP. To substantiate its submission, MSEDCL presented quarter-wise break up of unmetered connected load and number of consumers and corresponding sales. The data submitted by MSEDCL indicated progressive sales and index reaching to yearly average index of 1169 kWh/HP/year.

**Table 6: Unmetered agricultural sales for FY 2010-11**

Qtr	HP	Sale in the Qtr in MUs	Sale at the end of Qtr in MUs	Qtrly Index (Sale in MUs/HP)	Cumulative Index (Sale in MUs /HP)
Jun-10	59,24,732	2,056	2,056	347	347

Qtr	HP	Sale in the Qtr in MUs	Sale at the end of Qtr in MUs	Qtrly Index (Sale in MUs/HP)	Cumulative Index (Sale in MUs /HP)
Sep-10	61,26,018	1,626	3,682	265	601
Dec-10	64,41,111	1,992	5,674	309	881
Mar-11	72,52,058	2,802	8,476	386	1,169
<b>2010-11</b>	<b>72,52,058</b>	<b>8,476</b>	<b>8,476</b>	<b>1,307</b>	<b>1,169</b>

- 3.1.6 MSEDCL also submitted the calculation of subdivision wise unmetered agricultural consumption based on metered consumption for the quarter ending June 2010.
- 3.1.7 MSEDCL emphasized that the cumulative index of 1169 kWh/HP/year reported for FY 2010-11 was a derived number and has no role in arriving at the total unmetered agricultural sale during the year. It further argued that computing consumption of unmetered agricultural consumers by taking an average the corresponding unmetered connected load at the beginning and end of the year was not correct, which does not give actual unmetered consumption.
- 3.1.8 According to MSEDCL, if average connected load has to be used for computing unmetered agricultural sale then the index shall be the summation of all four quarterly indices, which in this case would be 1,307 kWh/HP/year. Under this method unmetered agricultural sale would have been 8,622 MUs considering average load of 65,956,472 HP and cumulative index of 1,307 kWh/HP/year. However, MSEDCL has reported total unmetered agricultural sale of 8,476 MUs. It further argued that if average quarterly load of 64,35,980 HP is considered, then also total unmetered agricultural sale would be 8,542 MUs considering the cumulative index of 1,307 kWh/HP/year.
- 3.1.9 MSEDCL emphasized that it has applied the methodology approved by the Commission to compute its unmetered sale, which it has detailed in its Petition.
- 3.1.10 MSEDCL stated that the agricultural consumers are geographically scattered and meter reading of such unevenly located consumers was a challenging task, where MSEDCL is making gradual improvement. With the implementation of different corrective measures, viz., proper metering, proper meter reading, photo meter reading, etc. MSEDCL has been able to ascertain the consumption of the metered category and hence that of the unmetered category. However, due to different constraints viz., non-availability of meter reading agencies, difficulty in tracing the consumers, resistance of consumers to metering, MSEDCL is hardly able to assess the proper index, or conduct the correct energy audit. It also submitted that agricultural feeder separation has not been completed entirely in the state and hence considerable quantum of consumers is being supplied on the feeders with enhanced supply availability (mixed feeders), increasing the unmetered index. To work out normal meter index more precisely, rigorous efforts are being taken by MSEDCL for micro-monitoring unmetered sales. MSEDCL requested the Commission to approve the unmetered agricultural consumption as per Audited Accounts.
- 3.1.11 Based on the submissions of MSEDCL as explained above, the Commission is inclined to accept the submission of MSEDCL in regard to unmetered agricultural sales for FY 2010-11. However, it is to be noted that MSEDCL has itself submitted that due to several constraints it is unable to properly determine the index for

- unmetered agricultural sales. In the Order in Case No. 100 of 2011 the Commission directed MSEDCL to institute a study to determine the correct specific consumption for unmetered agricultural connections based on consumption of metered connections. The Commission directed MSEDCL to submit the report containing the findings of such study to the Commission within one year from the date of the said Order.
- 3.1.12 Therefore, in light of the abovementioned facts and figures, the Commission feels that once the report for determination of indices is prepared the Commission will be in a position to determine the unmetered agricultural sales more accurately.
- 3.1.13 For the purpose of Truing up of sales for FY 2010-11 the Commission is accepting MSEDCL's submission for the time being. However, after receipt of the report the Commission may revisit the unmetered agricultural sales of MSEDCL for FY 2010-11. Accordingly, the Commission may re-determine the sales of MSEDCL for FY 2010-11, if necessary at a later stage. In case of such re-determination, distribution loss computation of MSEDCL will also undergo change and accordingly the computation of sharing of losses and gains will change for FY 2010-11. However, the impact of such change will not carry any carrying cost either on MSEDCL or on consumers, as the case may be.

### **3.2 Energy balance and distribution loss**

- 3.2.1 In the earlier paragraphs the Commission has approved total retail sales of 71,280 MUs in MSEDCL's area of supply. MSEDCL submitted that its actual distribution loss for FY 2010-11 had been 17.28% against 18.20% approved in its APR Order in Case No. 100 of 2011. However, it did not mention in its Petition that 18.20% was only a provisional approval as MSEDCL had failed to submit required data in relation to inter-state transmission losses at the time of Annual Performance Review of FY 2010-11. Also MSEDCL did not mention in its Petition that the Commission had given it a target of 17.20% of distribution loss for FY 2010-11 in the Tariff Order dated 12 September, 2010 in Case No. 111 of 2009.
- 3.2.2 The Commission asked MSEDCL to provide a certificate from SLDC showing the total energy drawl by MSEDCL at T<math>\leftrightarrow</math>D interface. MSEDCL submitted the required SLDC certificate dated 2 April, 2012. The Commission noticed a discrepancy between the energy drawl at T<math>\leftrightarrow</math>D interface as shown by MSEDCL and as observed from the SLDC certificate. The Commission therefore asked MSEDCL to clarify why there is a discrepancy between the "Energy Balance" format and the SLDC certificate. MSEDCL replied stating the following:

*"As per the SLDC Certificate dated 2.4.12, total injected power at MSETCL periphery i.e. contracted purchase of MSEDCL is 89459 Mus. The total Energy drawn at MSEDCL T-D interface is shown as 87,289 Mus which actually drawl of MSEDCL i.e. net off transmission losses. The transmission losses are applied on this energy and the Energy at MSETCL periphery is calculated which comes to 91,239 MUS and not 106,920 MUS as shown in the statement.*

*Since this is the Drawl Figure, the same cannot be reflected in energy Balance Statement of MSEDCL in which Power Purchase at generation periphery is shown. The SLDC certificated dated 2.4.12 is attached as Annexure E."*

- 3.2.3 MSEDCL has not been able to provide any reconciliation between the energy at the distribution periphery (86,170 MUs) and the energy drawn at T<=>D interface (87,289 MUs) as shown in the SLDC certificate. Therefore, the Commission directs MSEDCL to provide a reconciliation between the above 2 numbers within three (3) months from the date of this Order.
- 3.2.4 In Case No. 100 of 2011, while doing the Annual Performance Review of MSEDCL the Commission had raised doubts about MSEDCL's estimate of inter-state transmission losses at 1.17% for FY 2010-11 and had directed MSEDCL to examine the same more closely at the time of submitting its Petition for Truing up.
- 3.2.5 In the present Petition MSEDCL has submitted that it had examined various possible reasons for such low level of inter-state transmission losses and concluded that some portion of power purchased for ZLS and from traders were coming from within the state only, which was earlier accounted for as purchase from outside the state. This anomaly in the energy accounting had given rise to the distortion. The submission of MSEDCL in this regard is quoted below:

*"2.5.7 Accordingly, MSEDCL has studied the various possible reasons for such low level of Interstate Transmission Losses. While analyzing the power purchase, it was observed that some portion of the ZLS and Traders was coming from sources within State only.*

**Table 11: ZLS power coming from within and Outside State**

Sr. No..	Source	Quantum (MUs)	Amount (crore)	Location
1.	TPTCL	203.70	108.29	Within
2.	NVVN	538.27	245.68	Outside
3.	KSK WARDHA POWER	397.52	192.63	Within
4.	GMR ENERGY	77.22	40.69	Outside
5.	PTC	55.92	32.68	Outside
6.	IEX	190.39	68.00	Outside
7.	Knowledge	3.23	1.14	Outside
8.	TPC UNIT 4	52.03	29.78	Within
9.	GTPS uran	32.46	18.39	Within
10.	KORADI VINTAGE	485.83	160.00	Within
11.	BHUSAWAL VINTAGE	6.70	2.68	Within
12.	PARAS I AND II VINTAGE	10.71	4.29	Within
13.	PARLI VINTAGE	5.29	2.11	Within
14.	SHREE CEMENT	1.00	0.41	Within
15.	CPP	422.89	209.34	Within
16.	JSW PTCL	20.80	13.15	Within
17.	RPG PTCL	7.55	3.57	Outside
18.	NETSL	114.81	43.19	Outside
	<b>Total</b>	<b>2626.32</b>	<b>1176.02</b>	
Percentage of Power Purchase within the State			62.40%	
Percentage of Power Purchase from Outside the State			37.60%	

**Details of Power Purchased from Traders in FY 2010-11**

Traders	MUs	Amount (crore)	Rate (Rs./Unit)
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TPTCL	30.29	16.51	5.45
NVVN	282.48	126.14	4.47
KSK WARDHA POWER	433.23	192.63	4.45
GMR ENERGY	25.09	12.33	4.91
PTC	52.80	32.68	6.19
INDRJEET POWER	32.85	12.53	3.82
IEX	150.75	63.67	4.22
Knowledge	2.46	0.97	3.93
TPC UNIT 4	52.03	29.78	5.72
GTPS Uran	32.46	18.39	5.67
KORADI VINTAGE	323.69	136.78	4.23
BHUSAWAL VINTAGE	51.88	20.75	4.00
PARAS I AND II VINTAGE	39.73	15.89	4.00
PARLI VINTAGE	61.21	24.48	4.00
TPC UNIT 6	23.42	14.04	6.00
SHREE CEMENT	0.90	0.44	4.88
JSW PTCL	472.25	174.37	3.69
JSW EL	84.09	23.54	2.80
Korba	22.08	6.27	2.84
NETSL	248.00	93.56	3.77
Total	2421.71	1015.75	4.19

2.5.8 Accordingly, around 63% of total power purchased for ZLS from CPP and Traders is considered within State only and balance from outside State. Also the NPCIL Tarapur also considered as source within Maharashtra. In addition to this, there is some portion of energy which is injected and drawn at 33kV which is however included in the Energy at distribution periphery on which no interstate transmission losses would be applicable. Further, MSEDCL submits that MSEDCL considered entire UI quantum as within the State which previously was shown as Outside the State. Considering above facts, MSEDCL has revised the interstate transmission losses 3.38%.

2.5.9 MSEDCL further submits that since it has now considered the entire energy received from Tarapur as well as some portion of power purchased for ZLS from CPP and Traders within the State; which was earlier in Petition No. 100 of 2011 considered outside the State. Because of this, there is a difference of 7,901 MUs in the total power purchased within Maharashtra compared to the approved power purchased within Maharashtra. Similarly, there is a difference of (7,901) MUs for the power purchased outside Maharashtra as well.

2.5.10 MSEDCL would like to submit that MSEDCL is procuring power from various Sources including MSPGCL, RGPPL, CGS including nuclear power plants, Traders, CPP and NCE. Some of these Sources are within Maharashtra and some are outside Maharashtra. MSEDCL procures power from Central Generating Stations located in Western, Eastern and Northern Region. It would be very difficult to differentiate which power is coming from which source at

*Transmission periphery. So applying individual Inter-state Transmission Losses for each Station would give a distorted picture. Also the respective RLDCs give the Pooled transmission losses for every week for a particular regional grid. It would not be appropriate to presume Inter-State Transmission Loss as the average of Pooled transmission losses for 52 weeks of a particular regional grid. The weekly Pooled transmission losses for a particular regional grid keep on changing for every week. e. g. The Pooled transmission losses of Western Regional Grid for the Period 28th March 2011 to 18th March 2012 range from 2.40% to 4.30% per week. (2.30% to 6.08% for Northern Regional Grid for 21st February 2011 to 19th February 2012) Hence the average of 52 weeks of Pooled transmission losses will give incorrect losses.*

*2.5.11 MSEDCL also submits that it considers the metered energy at bus-bar of the generating station metered energy at T <> D interface i.e. at Distribution Periphery and metered sales at consumer end. It is further to state that MSEDCL considers metered energy at Distribution periphery and metered sales at consumer end and calculates the Distribution Loss of MSEDCL. The losses submitted by MSETCL taken as Intra State Loss and balance considered as inter-state loss. Thus interstate loss is a derived figure. Accordingly, MSEDCL has calculated the Inter-State Losses in the Energy Balance Statement. ”*

- 3.2.6 Time and again, MSEDCL has reiterated that it gets actual energy reading only at three points; (a) at the generation bus bar; (b) at the T<>D interface (distribution periphery); and (c) at the retail sales made to consumers. All others are derived numbers. Therefore, it is not worthwhile to try to examine too much into the reported level of inter-state transmission loss, particularly when MSEDCL has estimated it at 3.38% for FY 2010-11, which does not seem unlikely. In any case the distribution loss of MSEDCL is determined based on the energy received by it at the distribution periphery and actual sales made.
- 3.2.7 The Commission observes that MSEDCL has considered intra-state transmission loss in FY 2010-11 at 4.23%. However, the SLDC’s report on state grid losses for FY 2010-11 shows the same at 4.31%. The Commission has considered the loss level for intra-state transmission as per SLDC’s report. Accordingly, the inter-state loss has been worked out to 3.06% based on the energy balance for FY 2010-11.
- 3.2.8 The energy balance reported by MSEDCL and approved by the Commission for FY 2010-11 is presented in the table below.

**Table 7: Energy Balance for FY 2010-11**

Sr. No..	Particulars	Units	FY 2010 -11		
			Approved in APR Order	Actual (MSEDCL)	Approved after Truing up
	<b><u>Purchase within Maharashtra</u></b>				
1	Purchase from MSPGCL	MUs	42,239	42,239	42,239
2	NPCIL Tarapur	MUs		3,614	3,614

Sr. No..	Particulars	Units	FY 2010 -11		
			Approved in APR Order	Actual (MSEDCL)	Approved after Truing up
3	Purchases from other sources and Medium-term	MUs	16,639	16,639	16,639
4	Zero load shedding	MUs		1,655	1,655
5	Traders	MUs		1,526	1,526
6	IBSM + FBSM	MUs	225	225	225
7	Power of other distribution licensee on MSEDCL Network	MUs			-
8	UI	MUs		1,108	1,108
A	<b>Total Purchase within Maharashtra</b>	<b>MUs</b>	<b>59,103</b>	<b>67,004</b>	<b>67,004</b>
	<b><u>Purchase outside Maharashtra</u></b>				
1	Central Generating Station + UMPP + Case I + Sardar Sarovar + Pench	MUs	25,084	21,469	21,469
2	Traders	MUs	2,420	896	896
3	UI	MUs	1,108		
4	Zero load shedding	MUs	2,626	972	972
	<b>Total Purchase outside Maharashtra</b>	<b>MUs</b>	<b>31,238</b>	<b>23,337</b>	<b>23,337</b>
1	Inter-State transmission loss	%	1.17%	3.38%	3.06%
2	Total purchase at Maharashtra periphery	MUs	30,873	22,548	22,623
3	Total power purchase payable	MUs	<b>90,341</b>	<b>90,341</b>	<b>90,341</b>
B	<b>Total Power Available at Transmission Periphery</b>	<b>MUs</b>	<b>89,976</b>	<b>89,553</b>	<b>89,628</b>
	<b><u>Energy Available at Distribution periphery</u></b>				
1	Intra-state loss	%	4.23%	4.23%	4.31%
2	Energy at distribution periphery injected from 33 kV and above	MUs	86,170	85,765	85,765
3	Energy at distribution periphery injected and drawn at 33 kV	MUs		405	405
4	Energy at distribution periphery	MUs	86,170	86,170	86,170
5	Distribution losses	%	18.20%	17.28%	17.28%
6	Distribution losses	MUs	15,683	14,890	14,890



Sr. No..	Particulars	Units	FY 2010 -11		
			Approved in APR Order	Actual (MSEDCL)	Approved after Truing up
C	Energy Available for Sale	MUs	70,488	71,280	71,280

3.2.9 MSEDCL has achieved a distribution loss of 17.28% as compared to the target loss of 17.20%. The efficiency loss computation for distribution loss has been presented in the Section 3.23.

### 3.3 Power purchase cost

3.3.1 MSEDCL submitted that during FY 2010-11, it has purchased power from MSPGCL, NTPC, NPCIL, Sardar Sarovar Project, RGPPL, JSW, captive power projects and other sources. MSEDCL has submitted that the total power purchase cost for FY 2010-11 was Rs. 27,058 crore, including ZLS Power and Rs. 25,882 crore excluding ZLS Power. The source-wise break-up of power purchase and power purchase costs as submitted by MSEDCL is given in the table given below.

**Table 8: Source-wise break-up of power purchase cost for FY 2010-11**

Sr. No.	Particulars	Net units sent out for MSEDCL (MUs)	Total cost (Rs. crore)	Per unit rate (Rs./ kWh)
1	MSPGCL	42,239	12,327	2.92
2	NTPC			
	KSTPS	5,297	619	1.17
	VSTP I	3,595	717	1.99
	VSTP II	2,917	648	2.22
	VSTP III	2,510	620	2.47
	KAWAS	1,162	329	2.83
	GANDHAR	1,220	358	2.93
	FSTPP-EP	40	19	4.66
	KhSTPS-I	17	5	3.04
	KhSTPS-II	736	260	3.54
	TSTPS	24	7	2.74
	SIPAT TPS	2,475	452	1.83
	Total NTPC	19,992	4,032	2.02
3	NPCIL			
	KAPP	430	94	2.18
	TAPP 1&2	1,120	110	0.98
	TAPP 3&4	2,493	723	2.90
	Total NPCIL	4,044	926	2.29
4	SSP	948	194	2.05
5	PENCH	99	20	2.05
6	U.I. CHARGES	1,108	328	2.95
7	DODSON I	28	6	2.16

Sr. No.	Particulars	Net units sent out for MSEDCL (MUs)	Total cost (Rs. crore)	Per unit rate (Rs./ kWh)
8	DODSON II	41	15	3.69
9	RGPPPL	11,707	4,467	3.82
10	TRADING Company	2,422	1,016	4.19
11	ZERO LOAD SH	2,626	1,176	4.48
12	IPP – JSW	1,139	296	2.60
13	POWERGRID	-	529	-
14	Reactive Energy Ch	-	(2)	-
15	PSEB ( SUPPLIED)	(226)	3	-
16	PSEB ( RECEIVED)	226	6	-
17	BANKING	0	9	-
18	IBSM	225	149	-
19	WHEELING CHARGES	-	5	-
20	TOTAL PP	86,618	25,493	2.94
21	Non Conv. Energy Excl CPP	3,146	1,294	4.11
22	CPP	578	271	4.69
23	TOTAL PP INCLUDING NCE	90,342	27,058	3.00

3.3.2 MSEDCL submitted that during FY 2010-11, it had purchased power for implementation of Zero Load Shedding (ZLS) in the six revenue headquarters. MSEDCL further added that ZLS being revenue neutral scheme, cost of the same is recovered from the consumers benefitting from the ZLS scheme through reliability charges and additional sales through additional power procured for ZLS. MSEDCL submitted that since the cost of power purchased for ZLS is separately recovered from consumers of the beneficiary areas, the same has not been included by MSEDCL in the power purchase cost claimed in the Petition.

3.3.3 The Commission verified the power purchase cost from the Annual Accounts of FY 2010-11. Although the total power purchase cost was same as submitted by MSEDCL in its Petition, there was no source-wise reconciliation provided between the Audited Accounts and the data submitted in the Petition. MSEDCL, in response to the query raised by the Commission provided the following reconciliation for the deviation for non-conventional energy.

**Table 9: NCE reconciliation between Audited Accounts and Petition**

As per Schedule 16 of the Audited Accounts	Rs in crore
<b>NCE DETAILS</b>	
Oil & Natural Gas Commission	70
Cogen/Captive power project	518
Gen. Bagasse/Biomass/Ag. Waste	349
Non conventional sources	835
Generation solar energy	0
<b>TOTAL A</b>	<b>1,773</b>
<b>As per Form 2</b>	
Non conventional energy	1,294

As per Schedule 16 of the Audited Accounts	Rs in crore
CPP	271
<b>TOTAL B</b>	<b>1,565</b>
<b>Difference (A-B)</b>	208
Small hydro considered in Dodson deducted from Here	(1)
ZLS CPP added in ZLS in Form 2	209
<b>Total</b>	<b>208</b>

3.3.4 MSEDCL further provided the reconciliation between Schedule-16 of the Audited Accounts and the data provided in its Petition as shown below:

**Table 10: “Power purchase from traders” reconciliation between Audited Accounts and Petition**

As per Schedule 16 of the Audited Accounts	Rs in crore
<b>Traders</b>	1,479
<b>Total ( A)</b>	<b>1,479</b>
<b>As per Form 2</b>	
<b>Traders</b>	1,016
ZLS	1,176
Swap	9
<b>Total ( B)</b>	<b>2,201</b>
<b>Difference (A-B)</b>	(722)
ZLS CPP included in NCE sources in Sch 16	209
Vintage units of MSPGCL included in MSPGCL in Sch 16	409
Tata Power Co shown separately in Sch 16	74
Korba Unit III of NTPC not approved Sources from MERC, included in NTPC in Sch 16	6
Infirm Power From JSW Energy included in JSW	24
<b>Total</b>	<b>722</b>

3.3.5 The Commission finds the reconciliation provided by MSEDCL satisfactory. MSEDCL submitted that it included the amounts pertaining to the Commission’s Orders on the impact of Judgements of Hon’ble ATE in favour of MSPGCL in its appeal against certain Orders of the Commission in the power purchase cost for FY 2010-11, which are detailed below.

**Table 11: Impact of the Commission’s Orders on cost of power purchased from MSPGCL**

MERC Order	Particulars	Amount (Rs. crore)
Case No. 72 of 2011	Hon’ble ATE Judgment dated 27th April, 2011 in Appeal No. 191 of 2009	340.09
Case No. 74 of 2011	Hon’ble ATE Judgment dated 27th April, 2011 in Appeal No. 72 of 2010	220.40
Case No. 75 of 2011	Hon’ble ATE Judgment dated 24th May, 2011 in Appeal No. 99 of 2010	203.45

- 3.3.6 MSEDCL submitted that all the Orders of the Hon'ble ATE were related to the Tariff Order of the Commission for FY 2010-11 in respect of Paras U3 and Parli U6 and carrying cost for the period of FY 2005-06 to FY 2009-10. The amount which was required to be paid by MSEDCL, as a consequence of the Hon'ble ATE's Judgement in favour of MSPGCL, was to be paid in six monthly instalments to MSPGCL. MSEDCL further added that although it did not pay these additional costs in FY 2010-11, it has made the provision for the same in Audited Accounts of FY 2010-11, since Audited Accounts for FY 2010-11 were not finalised till July 2011. MSEDCL submitted that it had added the cost in power purchase expenses of FY 2010-11 in line with the provisions of Accounting Standard (AS) 4 for Contingencies and Events occurring after the balance sheet date.
- 3.3.7 The Commission accepts the provisioning of the impact of the Orders No. 72, 74 and 75 of 2011.
- 3.3.8 The Commission observes that the short term power (excluding ZLS) is 4% of the total power purchased (excluding ZLS). The average rate of short term power purchase was Rs. 4.19 per kWh. In FY 2010-11, the average rate of bilaterally traded power was Rs. 4.79 per kWh and the average rate of power traded at the power exchange was Rs. 3.47 per kWh as per the "Report on Short-term Power market in India: 2010-11" published by the Hon'ble CERC. The Commission observes that this rate is lower than the average rate of bilaterally traded power for FY 2010-11, but higher than the average rate of power traded at power exchange for FY 2010-11.

#### 3.4 Renewable purchase obligation for FY 2010-11

- 3.4.1 As per the MERC (Renewable Purchase Obligation, its Compliance and implementation of REC framework) Regulations, 2010 (RPO Regulations) notified on June 7, 2010, each distribution licensee is required to meet 6% of its requirement through renewable sources for FY 2010-11, including 0.25% through solar sources.
- 3.4.2 MSEDCL submitted the following details of procurement through renewable energy sources for FY 2010-11.

**Table 12: Procurement from renewable sources as submitted by MSEDCL**

Source	Target	Achievement
Non-solar (MUs)	4,908	4,927
Non-solar as a % of total power purchase	5.75%	5.77%
Solar (MUs)	213	1.13
Solar as a % of total power purchase	0.25%	0.0013%

- 3.4.3 However, the Commission noticed that in the Tariff filing formats, under the head of Non-conventional Energy, only 3,146 MUs was shown as power purchase for renewable sources. The Commission raised this query to which MSEDCL replied. The details of the query of the Commission and MSEDCL's reply are provided below.

***The Commission's query***

15) *The renewable energy purchase has been shown as 3146 MUs for FY 2010-11 (under the head NCE) in Formats and in Page 26 of the Petition. However, in Petition on page number 289, the same has been mentioned as 4926.9293 MUs for non-solar and 1.1289 MUs for solar. MSEDCL is required to reconcile this difference.*

**MSEDCL's Reply:**

*MSEDCL submits that the difference in NCE units on page no. 26 and page no. 289 of the Petition is due to following reasons:*

*The RPO is calculated as per the IBSM report. This is due to the fact that, it has been directed by MEDA to submit the RPO report strictly in line with IBSM report. The letter of MEDA is enclosed as per Annexure E.*

*Accordingly, all the Utilities are submitting the RPO fulfillment report as per data available from IBSM report of SLDC.*

*The IBSM report does not segregate the Sale to MSEDCL units and wheeled units under Open Access.*

*The Total consumption as well as RE generation as shown against MSEDCL includes procurement along with the energy wheeled by the Open Access consumers.*

*Moreover, it is learnt that, SLDC reflects/considers the entire balance energy in MSEDCL's account after crediting the units of other utilities in the State."*

3.4.4 MSEDCL submitted that it has procured 1,822 MUs through various wind energy sources in FY 2010-11. MSEDCL further submitted that they had contracted 309 MW through cogeneration plants, 127 MW through biomass plants and 30.65 MW through small hydro plants in FY 2010-11. However, MSEDCL has not been able to provide the complete breakup (in MUs) of procurement of renewable energy for FY 2010-11. Further, MSEDCL has stated that the renewable purchase is as per the IBSM report, which also includes purchases made by Open Access consumers. Hence, the Commission is unable to verify whether MSEDCL has been able to meet its non-solar RPO obligation for FY 2010-11. Therefore, MSEDCL is directed to provide the details of break-up of renewable power purchase (in MUs) for FY 2010-11 within three (3) months of the date of this Order.

3.4.5 Also, as per the RPO Regulations, 0.1% of the RPO obligation should be met through mini/ micro hydro projects. MSEDCL did not provide the details of procurement from min/ micro hydro projects for FY 2010-11. The Commission asked MSEDCL to furnish the details of such procurement. MSEDCL replied stating that there aren't enough mini/ micro hydro sources in Maharashtra and hence MSEDCL has not been able to meet the target specified in the RPO Regulations. The Commission asked MSEDCL to provide its plan for meeting such shortfall. MSEDCL replied to the Commission's query as follows:

*"Mini Micro projects are those having capacity below 1 MW. Currently, there are only 3 projects commissioned under this category namely, Shahnoor (0.75 MW),*

*Yeoteshwar (0.75 MW) and Tembhu, MSPGCL (0.2 MW). The first two are Government Projects and the power is procured from them at the rate of Rs. 2.05 per unit from the date of commissioning. The EPAs are to be executed shortly.*

*Moreover, it is to submit that the EPAs are being executed with all the RE project holders approaching for sell of power to MSEDCL. As and when the Mini/ Micro project holder approaches MSEDCL, the EPA shall be executed in order to fulfill our RPO target.”*

- 3.4.6 The Commission is of the view that MSEDCL should make efforts to fulfil its RPO obligation and should make up for the shortfall in procurement in mini/micro hydro projects in FY 2010-11 by FY 2013-14. With regard to solar RPO obligation, the Commission notes MSEDCL’s concern that there has been an unavailability of solar power in FY 2010-11. Therefore, the Commission directs MSEDCL to make up for the shortfall of solar RPO in FY 2010-11 by FY 2015-16.
- 3.4.7 The Commission also noted that there were some differences between the quantum of energy sold and revenue from sale of power for FY 2010-11, as approved in the Order in Case No. 6 of 2012 on True-Up of FY 2010-11 for MSPGCL and that claimed by MSEDCL in the Petition under the present case. The Commission asked MSEDCL to clarify the discrepancy. MSEDCL submitted the following reconciliation statement to clarify the above discrepancy.

**Table 13: Reconciliation between MSPGCL's Order in Case no. 6 of 2012 and Petition (MUs)**

Sr. No..	Name of stations of MSPGCL	Purchase as per MSEDCL	As per Commission's approval for MSPGCL	Diff.	Reason
1	Bhusawal	2,153.57	2,157.18	(3.61)	Due to auxiliary cons and actual data from TPS
2	Khaparkheda	5,157.71	5,157.72	(0.01)	
3	Nashik	4,498.12	4,498.12	0.00	
4	Chandrapur	9,734.01	9,745.40	(11.39)	Due to auxiliary cons and actual data from TPS
5	Paras	47.11	47.56	(0.45)	Due to auxiliary cons and actual data from TPS
6	Paras Unit-3	1,303.62	1,308.79	(5.17)	Different FAC units and Billed units

Sr. No..	Name of stations of MSPGCL	Purchase as per MSEDCL	As per Commission's approval for MSPGCL	Diff.	Reason
7	Paras Unit-4	765.89	761.32	4.57	Different FAC units and Billed units and infirm power of 309 MUs till August 2010
8	Parli	2,975.81	2,975.72	0.09	
9	New Parli Unit-6	1,445.29	1,445.29	(0.01)	
10	New Parli Unit-7	778.03	778.03	0.00	Infirm power 317 MUs upto July 2010
11	Koradi	3,104.92	3,109.73	(4.81)	Due to auxiliary consumption and actual data from TPS
12	Uran GTPS	5,334.60	5,335.76	(1.16)	Rounding difference
13	Hydro - Peak Hours	1,312.34	3,763.61	22.39	
14	Hydro - Non-peak hours	2,473.66			
15	Small Hydro Power	842.20	841.45	0.75	
	Total from MSPGCL	41,926.90	41,925.68	1.22	
16	Ghatghar	(123.71)			Not considered by MSPGCL
17	Infirm	626.01			
18	Koradi Vintage	(190.00)			
	Total from MSPGCL as per Petition of MSEDCL	42,239		2.44	

3.4.8 The Commission has noted the reconciliation statement provided by MSEDCL and has considered the power purchase cost from MSPGCL as per the Audited Accounts. The Commission approves the net power purchase expenses (excluding ZLS power) of Rs. 25,882 crore as submitted by MSEDCL.

**Table 14: Power purchase expenses for FY 2010-11**

(Rs. crore)

Particulars	APR Order	Actual	Approved after final Truing up
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Particulars	APR Order	Actual	Approved after final Truing up
Power purchase expenses	25,222	25,882	25,882

### 3.5 Transmission charges and SLDC charges for FY 2010-11

3.5.1 MSEDCL submitted that it had paid actual intra-state transmission charges including SLDC charges of Rs. 1,891.59 crore. The Commission verified this amount in Schedule-16 of the Audited Accounts of MSEDCL and has found the amount claimed by MSEDCL to be accurate. Therefore, the Commission approves the same for Truing up of FY 2010-11.

**Table 15: Transmission charges including SLDC charges for FY 2010-11**

(Rs. crore)

Particulars	APR Order	Actual	Approved after final Truing up
Transmission charges	1,892	1,892	1,892

### 3.6 O&M expenses for FY 2010-11

3.6.1 Operation and maintenance (O&M) expenses comprise employee expenses, A&G expenses and R&M expenses. MSEDCL, in its Petition, has submitted that the actual net O&M expenses for FY 2010-11 were Rs. 2881 crore, comprising employee expenses of Rs. 2,135 crore (including deferred employee expenses), A&G expenses of Rs. 514 crore and R&M expenses of Rs. 232 crore. MSEDCL's submission and Commissions ruling on each sub-head of O&M expenses are given below.

3.6.2 MSEDCL, in its Petition in Case No. 19 of 2012, pointed out that the Commission in the Order dated 18 May, 2007 had mentioned that a suitable norm for allowance of O&M expenses could be adopted after undertaking a thorough study of the O&M expenditure based on the past performances, and the cost drivers for the same through a separate process. The Commission had further said that till such time such a norm was determined, it had approved the O&M expenses for the first control period based on the inflation indices.

3.6.3 MSEDCL submitted in its Petition that the Commission is determining the O&M expenses based on the inflation indices despite the fact that first control period under MYT regime, which was applicable till FY 2009-10, is over.

3.6.4 MSEDCL further submitted that Tariff Regulations, 2005 do not specifically mention about approving O&M expenses based on inflationary indices. The Tariff Regulations, 2005 provide for allowing all reasonable and justifiable expenses.

3.6.5 The Tariff Regulations, 2005 provide for allowing all reasonable and justifiable expenses. The Commission, while carrying out the True-Up exercises for MSEDCL in the past, has considered and allowed all such expenses that have been appropriately justified by MSEDCL as uncontrollable increase compared to the approved O&M expenditure. However, the entire O&M expenditure cannot be



- considered as uncontrollable, as implied by MSEDCL in its arguments presented above.
- 3.6.6 The purpose of approving O&M Expenses in the ARR is to set a reasonable target of O&M Expenses. The provision of sharing of efficiency gains and losses is a means of promoting efficient performance and penalizing inefficient performance of the utilities. A target of O&M Expenses should be set considering the factors which lead to increase in employee, repairs and maintenance and administrative and general expenses. These three expenses are directly influenced by the level of inflation in the economy. WPI and CPI are widely accepted indices to measure inflation in the economy. Against this, MSEDCL, in this Petition and in the past Petitions, has proposed the O&M expenses based on the past increases or expected increases, which generally do not have any specific and firm basis.
- 3.6.7 It may again be reiterated here that in spite of the fact that the Commission has approved the O&M expenses based on the inflation indices in the Tariff Orders in the past, the Commission has always considered the submissions of MSEDCL while Truing up the expenses for the past years. If any expenses under any of the three heads of O&M expenses are justified by MSEDCL as uncontrollable, such expenses are completely allowed to be passed through in Tariff.
- 3.6.8 Hence, the Commission shall continue to apply the principle of approving O&M expenditure based on inflation indices for FY 2011-12 and FY 2012-13, i.e. till the time the Tariff Regulations, 2005 is applicable.

#### **Employee Expenses**

- 3.6.9 MSEDCL submitted that the net employee expenses in FY 2010-11 were Rs. 2,135 crore as against Rs. 1,983 crore approved by the Commission in the Order dated 30 December, 2011 in Case No. 100 of 2011.
- 3.6.10 MSEDCL submitted that there was an increase in some of the components of employee expenses like Basic Salary, HRA, Conveyance Allowance, Gratuity, Bonus and Staff Welfare Expenses compared to FY 2009-10.
- 3.6.11 The Commission found the expenses under some sub-heads under the employee expenses had increased substantially as compared to that incurred in FY 2009-10. The analysis of the year on year increase between FY 2009-10 and FY 2010-11 is given in the table given below. The Commission asked MSEDCL to justify such steep increases in the sub-heads in which the increase was substantially high.

**Table 16: Analysis of Employee Expenses of FY 2010-11**

Sr. No..	Particulars	FY 2010-11 (Rs. crore)	FY 2009-10 (Rs. crore)	% increase from FY 2009-10 to FY 2010-11
1	Basic Salary	1,201	1,054	14%
2	Dearness Allowance (DA)	429	391	10%
3	House rent allowance	142	103	39%
4	Conveyance allowance	12	6	91%
5	Leave travel allowance	1	1	5%
6	Earned leave encashment	157	38	311%

Sr. No..	Particulars	FY 2010-11 (Rs. crore)	FY 2009-10 (Rs. crore)	% increase from FY 2009-10 to FY 2010-11
7	Other allowances	84	75	13%
8	Medical reimbursement	21	21	0%
9	Overtime payment	23	19	21%
10	Bonus/Ex-Gratia payments	35	30	16%
11	Interim relief / wage revision	-	-	NA
12	Staff welfare expenses	14	10	40%
13	VRS expenses/Retrenchment compensation	0	18	-100%
14	Commission to directors	-	-	NA
15	Training Expenses	-	-	NA
16	Payment under Workmen's compensation Act	1	4	-59%
<b>17</b>	<b>Net Employee Costs</b>	<b>2,122</b>	<b>1,770</b>	<b>20%</b>
18	Terminal benefits			NA
18.1	Provident fund contribution	198	178	12%
18.2	Provision for PF fund	-	-	NA
18.3	Pension payments	1	1	-5%
18.4	Gratuity payment	261	120	117%
19	Others	27	8	234%
<b>20</b>	<b>Gross Employee Expenses</b>	<b>2,609</b>	<b>2,077</b>	<b>26%</b>
21	Less: Expenses capitalized	562	238	136%
<b>22</b>	<b>Net employee expenses</b>	<b>2,047</b>	<b>1,838</b>	<b>11%</b>

3.6.12 MSEDCL submitted that the increase in the basic salary was due to the following reasons:

- During the year 1,319 employees were added;
- Higher grade benefit were offered to the employees with no promotion channel on third occasion; and
- Routine annual increment and fitment of basic on account of promotion to the employees.

3.6.13 MSEDCL submitted that HRA is directly related to basic salary of employees and as the basic salary has increased, the HRA has also increased accordingly. MSEDCL further submitted that HRA of the employees has increased as given in the table given below w.e.f. August 2009 based on the State Government Circular no. Govt./Finance/HRA/1009/Q.N. 67/ser-5 dated 24 August 2009.

**Table 17: Revision in HRA as submitted by MSEDCL**

Sr. No..	Category of City	Original Rate	Revised Rate	Increase
1	A,B-1,B-2	15%	20%	5%

Sr. No..	Category of City	Original Rate	Revised Rate	Increase
2	C	7.5%	10%	2.5%
3	C	5%	10%	5%

- 3.6.14 Regarding conveyance allowance, MSEDCL submitted that the arrears (increase in salary) due to wage revision were paid from the month of September 2009 and onwards. The actual expenditure from September 2009 to March 2010 has come in the books of accounts. The provision for the period of April 2009 to August 2009 was made at Rs. 73 crore. However, while making provision the individual account heads were not operated.
- 3.6.15 MSEDCL further submitted that, 1,319 employees have been added during FY 2010-11 as compared to the previous year. Therefore, expenditure on conveyance allowance for the FY 2010-11 was more as compared to FY 2009-10.
- 3.6.16 Regarding the high increase in gratuity, MSEDCL submitted that the gratuity expenses had increased during FY 2010-11 as compared to the previous year due to the following reasons:
- During FY 2010-11, the gratuity limit of Rs. 3.5 Lakhs was increased to Rs. 10 Lakhs by the Central Government by amending the Gratuity Act;
  - During the year, 1319 employees were added;
  - Higher grade benefit were offered to the employees with no promotion channel on third occasion;
  - Routine annual increment and fitment of basic on account of promotion of the employees; and
  - Dearness allowance has increased more during FY 2010-11 as compared to FY 2009-10.
- 3.6.17 The Commission asked MSEDCL to quantify the increase in basic salary, HRA and gratuity due to various factors outlined by MSEDCL. MSEDCL submitted that its data base does not have a provision to capture the above information. The Commission noted MSEDCL's current limitations in providing the required break-up. However, MSEDCL should take appropriate steps to make such information available for the next Petition on Tariff related matters.
- 3.6.18 Regarding the reasons for the steep increase in expense on bonus, MSEDCL submitted that during the FY 2009-10, employees of MSEDCL were paid ex-gratia at the rate of Rs. 6000 per employee; however, during FY 2010-11, the ex-gratia was paid at the rate of Rs. 7000 per employee. MSEDCL added that the increase was also on account of increase in number of employees in FY 2010-11.
- 3.6.19 Regarding the reasons for high increase in staff-welfare expenses, MSEDCL submitted that the retiring employees were being honoured with shawl and sari costing up to Rs. 1500 till the end of FY 2009-10. However, this limit was increased to Rs. 3,000 during FY 2010-11, which has led to the increase in the staff-welfare expenses in the current year. MSEDCL added that a silver coin with a logo of the company was also given to the retiring employees.

- 3.6.20 Regarding the reasons for high increase in expenses under the head Others, MSEDCL submitted that as per the Accounting Standard 15 issued by ICAI, enterprise should provide for proportionate share of the actuarial risk and investment risk. MSEDCL added that the provision amounting to Rs. 19.75 crore for proportionate shortfall in the expenditure and income of MSEDCL contributory Provident Fund Trust was made by MSEDCL during the year FY 2010-11, whereas such provision was not made during FY 2009-10. MSEDCL clarified that this policy has been adopted from FY 2010-11 and hence has resulted in the increase in expenses under the head Others.
- 3.6.21 Regarding the reasons for high increase in expenses under the head “employee leave encashment”, MSEDCL submitted that previously employees of MSEDCL were entitled to receive earned leave encashment at the time of retirement up to accumulated leave balance of maximum 240 days. This limit was extended to 300 days in September, 2008. The impact of this extended limit of leave encashment has been considered while making provision for leave encashment of FY 2010-11. Hence the leave encashment provision has increased considerably. MSEDCL added that the leave encashment provision is made in the books of accounts based on the certification and valuation given by the Actuary as per the Accounting Standard 15 issued by ICAI.
- 3.6.22 The Commission accepts MSEDCL’s submissions with respect to increase in the various sub-heads of employee expenses. The Commission approves the gross employee expenses for FY 2010-11 amounting to Rs. 2,609 crore as submitted by MSEDCL.
- 3.6.23 MSEDCL submitted that it has capitalised employee expenses to the extent of Rs. 562 crore in FY 2010-11. MSEDCL submitted that capitalisation of employee expenses is directly related with capital expenditure incurred during the year. Any increase in employee expenses will result into higher capitalisation. MSEDCL further submitted that increase in employee expenses need to be considered on gross basis and not on net off capitalisation. The Commission approves the capitalised employee expenses of Rs. 562 crore as submitted by MSEDCL, which is as per Audited Accounts.
- 3.6.24 The Commission thus approves the net employee expenses of Rs. 2,047 crore for FY 2010-11, as submitted by MSEDCL.
- 3.6.25 Further, MSEDCL has considered an additional expense of Rs. 88 crore for the deferred expenses for Earned Leave Encashment to be recovered in five equal yearly instalments between FY 2006-07 and FY 2010-11 which was approved by the Commission in the Order dated 20 June, 2008 in Case No. 72 of 2007. The Commission approves the deferred employee expense of Rs. 88 crore as submitted by MSEDCL.
- 3.6.26 Accordingly, the Commission approves the total net employee expenses of Rs. 2,135 crore for FY 2010-11.

**Table 18: Approved Employee Expenses for FY 2010-11 (Rs. crore)**

Sr. No..	Particulars	APR Order	Submitted by MSEDCL	Approved by the Commission
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Sr. No..	Particulars	APR Order	Submitted by MSEDCL	Approved by the Commission
1	Gross Employee Expenses		2,609	2,609
2	Less: Employee Expenses Capitalised		562	562
3	Net Employee Expenses	1,895	2,047	2,047
4	Add: Deferred expense for Earned Leave Encashment	88	88	88
5	Net Employee Expenses	1,983	2,135	2,135

### A&G Expenses

- 3.6.27 MSEDCL submitted that the net A&G expenses in FY 2010-11 were Rs. 232 crore as against Rs. 268 crore approved by the Commission in the order dated 30 December, 2011 in Case No. 100 of 2011.
- 3.6.28 The Commission found that the expenses under some sub-heads under the A&G expenses had increased substantially as compared to that incurred in FY 2009-10. The analysis of the year-on-year increase in various sub-heads of A&G Expenses between FY 2009-10 and FY 2010-11 is given in the table given below. The Commission asked MSEDCL to justify such steep increases in the sub-heads in which the increase was substantially high.

**Table 19: Analysis of A&G Expenses for FY 2010-11**

Sr. No.	Particulars	FY 2010-11 (Rs. crore)	FY 2009-10 (Rs. crore)	% Increase from FY 2009-10 to FY 2010-11
1	Rent rates & taxes	46	36	28%
2	Insurance	0	0	74%
3	Telephone & postage, etc.	18	19	-5%
4	Legal charges & audit fee	12	19	-38%
5	Professional, consultancy, technical fee	10	12	-15%
6	Conveyance & travel	18	19	-7%
7	Electricity charges	16	13	20%
8	Water charges	4	3	43%
9	Security arrangements	38	30	27%
10	Fees & subscription	19	18	5%
11	Books & periodicals	0	0	-19%
12	Computer stationery	53	44	19%
13	Printing & stationery	16	17	-11%
14	Advertisements	9	4	140%
15	Purchase related advertisement expenses	-	-	0%
16	Contribution/donations	-	-	0%

Sr. No.	Particulars	FY 2010-11 (Rs. crore)	FY 2009-10 (Rs. crore)	% Increase from FY 2009-10 to FY 2010-11
17	License Fee and other related fee	0	0	9%
18	Vehicle running expenses truck / delivery van	9	8	11%
19	Vehicle hiring expenses truck / delivery van	23	21	10%
20	Cost of services procured	-	-	0%
21	Outsourcing of metering and billing system	66	57	16%
22	Freight on capital equipments	1	1	28%
23	V-sat, internet and related charges	-	-	0%
24	Training	-	-	0%
25	Bank charges	48	47	1%
26	Miscellaneous expenses	1	1	4%
27	Office expenses	10	8	29%
28	Others	23	13	80%
<b>29</b>	<b>Gross A&amp;G expenses</b>	<b>440</b>	<b>391</b>	<b>13%</b>
30	Less: expenses capitalized	208	88	136%
<b>31</b>	<b>Net A&amp;G Expenses</b>	<b>232</b>	<b>303</b>	<b>-23%</b>

- 3.6.29 Regarding the reasons for increase under the head Rent, Rates and Taxes, MSEDCL submitted that the expenditure under this head was more as compared to FY 2009-10 because during FY 2010-11, the property tax for Plot No. 3, 11 and 35 for Nerul division in Vashi circle for the FY 2006-07 to FY 2009-10 was paid in FY 2010-11. MSEDCL through its reply to a query raised by the Commission submitted that there was no penalty paid on account of such late payment of property tax.
- 3.6.30 Regarding the reasons for increase under the head Security Arrangements, MSEDCL submitted that the expenditure under this head was more as compared to FY 2009-10 due to overall increase in the salary of personnel and creation of new circle and divisions and section offices.
- 3.6.31 Regarding the reasons for increase under the head Advertisement, MSEDCL submitted the following reasons:
- As the load shedding protocol is revised from time to time, all O&M division are required to publish revised load shedding time tables in detail in local newspapers on each occasion of revision;
  - The Company has decided to publish the proposed DTC locations for information of general public. All O&M divisions publish the same in local newspapers. The advertisements are quite big in size; and
  - Ever increasing various types of infra activities call for publication of tender advertisements on and often.

- 3.6.32 Regarding the reasons for increase under the head Computer Stationary, MSEDCL submitted that during FY 2010-11, since the turnover and the number of employees has increased, there has been a increase in stationary expenses. MSEDCL further submitted that few new offices (i.e. circle, division, sub-division) have also been opened during FY 2010-11. MSEDCL added that since there is an increase in the activities of the company and also because of the inflationary trend in the market, the expenditure on computer stationary has increased.
- 3.6.33 Regarding the reasons for increase under the head Others, MSEDCL submitted that during FY 2010-11, Bandara and Gondia Circles have inadvertently accounted the salary paid to Veej Sevak to this account head, which lead to an increase of Rs. 0.20 crore. MSEDCL also submitted that Pune rural Circle had accounted Rs. 0.99 crore paid to Police Station Salary in this account.
- 3.6.34 MSEDCL added that expenses under the head Others also included fees paid to electrical inspectors for the inspection of sub-stations, transformers and other installations commissioned by the company. MSEDCL further clarified that during FY 2010-11, large number of new-substations were commissioned by MSEDCL under Infra-Scheme, leading to the higher expenditure under this head.
- 3.6.35 The Commission, after considering the above submissions by MSEDCL, approves the gross actual A&G expenses for FY 2010-11 as submitted. The Commission notes that though there is an increase in the number of circles, there would be lower expenses on account of creation of distribution franchisees. Hence, for computation of gains and losses, the Commission has considered the trued-up expenses of Rs. 232 crore for comparison with the target A&G expenses of Rs. 268 crore approved by the Commission in the Order dated 30 December, 2011. The Commission has carried out the computation of gains and losses in Section 3.23 of this Order.
- 3.6.36 MSEDCL submitted that it has capitalised A&G expenses to the extent of Rs. 208 crore in FY 2010-11. MSEDCL submitted that capitalisation of A&G expenses are directly related with capital expenditure incurred during the year and any increase in A&G expenses will result into higher capitalisation. MSEDCL further submitted that increase in A&G expenses needs to be considered on gross basis and not on net off capitalisation. The Commission approves the capitalised A&G expenses of Rs. 208 crore as submitted by MSEDCL.
- 3.6.37 The following table represents the A&G expenses as per MSEDCL's submission and Commissions approval.

**Table 20: Approved A&G Expenses for FY 2010-11(Rs. crore)**

Sr. No.	Particulars	APR Order	Submitted by MSEDCL	Approved by the Commission
1	Gross A&G expenses	---	440	----
2	Less: A&G expenses capitalized	---	208	----
3	Net A&G expenses	268	232	268

**R&M expenses**

- 3.6.38 MSEDCL submitted that the R&M expenses in FY 2010-11 were Rs. 514 crore as against Rs. 528 crore approved by the Commission during the APR for FY 2010-11.
- 3.6.39 MSEDCL submitted that R&M expenditure is dependent on various factors. The assets of MSEDCL are old and require regular maintenance to ensure uninterrupted operations. MSEDCL further submitted that it has been trying its best to ensure uninterrupted operations of the system and accordingly has been undertaking necessary expenses on R&M.
- 3.6.40 MSEDCL further submitted that R&M expenses, due to the nature of these expenses, cannot be considered as controllable expenditure as they are necessary to incur as and when required basis to supply quality power to its consumers on continuous basis.
- 3.6.41 The Commission is of the view that prudent planning and execution of R&M works should ensure that increase in R&M expenses does not cross a threshold limit. The Commission opines that in all the approvals in the past, adequate approvals for R&M expenses have been provided considering the appropriate requirements of R&M expenses. Further, the Commission, wherever necessary has allowed uncontrollable expenses during Truing up over and above the approved R&M expenses. The approved R&M expenses need to be considered as a target by MSEDCL and planned appropriately to contain the expenditures within these limits.
- 3.6.42 However, for FY 2010-11, the actual R&M expenses of MSEDCL have been lower than that approved by the Commission in the Order dated 30 December 2011. The following table presents the summary of R&M cost trued-up for FY 2010-11.

**Table 21: Approved R&M Expenses for FY 2010-11 (Rs. crore)**

Sr. No..	Particulars	APR Order	Submitted by MSEDCL	Approved by the Commission
1	Gross R&M expenses	528	514	528
2	Less: R&M expenses capitalized	-	-	-
3	Net R&M expenses	528	514	528

- 3.6.43 For computation of sharing of gains and losses, the Commission has considered the trued-up expenses of Rs. 514 crore for comparison with the target R&M expenses of Rs. 528 crore approved by the Commission in the Order dated 30 December, 2011. The Commission has carried out the computation of gains and losses in Section 3.23 of this Order.

### **3.7 Capital expenditure and capitalisation for FY 2010-11**

- 3.7.1 MSEDCL reported that the capitalisation for FY 2010-11 was Rs. 4,667 Core, of which Rs. 3,878 crore was on account of capitalisation of DPR schemes. This was against Rs. 3,280 crore approved in the APR Order of FY 2010-11. The project



details, capital expenditure and capitalisation submitted by MSEDCL are shown below:

**Table 22: DPR schemes in FY 2010-11**

(Rs. crore)

Sr. No.	Scheme code No.	MERC Approved Cost	capital expenditure during the year	Cumulative capital expenditure	Overrun of capital expenditure	Capitalisation during the year	Cumulative capitalisation	Excess capitalisation
<b>1</b>	<b>INFRA PLAN</b>							
1.1	MSEDCL/FY08/75 (total 120 DPR)	9,014	3,812	4,956	-	2,365	2,773	-
<b>2</b>	<b>GFSS</b>							
2.1	MSEDCL FY/07/01 PHASE I	895	37	1,004	109	246	917	23
2.2	MSEDCL FY/07/02 PHASE II	1,300	708	976	-	318	535	-
2.3	MSEDCL FY/10/19 PHASE III	209	81	134	-	56	94	-
2.4	MSEDCL FY/10/38 66 kV Elimination	148	0	0	-	0	0	-
<b>3</b>	<b>Fixed Capacitor Scheme</b>	-	-	-	-	-	-	-
3.1	MSEDCL FY/10/13 LT Fixed Capacitor Phase I	26	-	-	-	-	-	-
3.2	MSEDCL FY/11/03 LT Fixed Capacitor Phase II	37	-	2	-	0	2	-
<b>4</b>	<b>AMR</b>	-	-	-	-	-	-	-
4.1	MSEDCL/FY-05/01 AMR	48	9	15	-	5	11	-
<b>5</b>	<b>APDRP</b>							
5.1	PHASE I							
	MERC/CAP/DPR/1 2/08/1549 dt 30.07.2008	1,137	94	873	-	96	563	-
5.2	PHASE II	-	-	-	-	-	-	-
	MERC/CAP/DPR/1 2/09/1006 dt 26.05.2009	238	-	200	-	-	-	-
5.3	R-APDRP A	-	-	-	-	-	-	-
	MERC/CAP/DPR/1 2/10/2573 dt 11.11.2009	301	7	7	-	-	-	-
5.4	R-APDRP B	3,422	-	-	-	-	-	-
<b>6</b>	<b>Internal Reforms</b>	-	-	-	-	-	-	-
6.1	Phase I-I ( Part -I & Part II) DTC Metering Phase II	92	-	121	29	11	118	26
6.2	Phase - III	150	77	81	-	47	50	-

Sr. No..	Scheme code No.	MERC Approved Cost	capital expenditure during the year	Cumulative capital expenditure	Overrun of capital expenditure	Capitalisation during the year	Cumulative capitalisation	Excess capitalisation
7	SPA: PE	2,462	419	1,368	-	432	1,022	-
8	P:SI	477	23	323	-	36	256	-
9	P:IE	188	34	253	65	25	69	-
10	DRUM	168	10	187	20	27	185	18
11	RGVY	900	366	562	-	212	355	-
	<b>Total DPR</b>	<b>21,209</b>	<b>5,675</b>	<b>11,062</b>	<b>222</b>	<b>3,878</b>	<b>6,950</b>	<b>66</b>

3.7.2 The information as submitted by MSEDCL for FY 2010-11 for Non-DPR schemes is as below:

**Table 23: Non-DPR schemes for FY 2010-11**

(Rs. crore)

Sr. No..	Particulars	Capital expenditure during FY 2010-11	Capitalisation during FY 2010-11
1	SPA: PE	69	71
2	P:SI	13	2
3	P:IE	2	14
4	FMS	0	0
5	MIS	2	4
6	Load Mnagement	11	9
7	Dist. Scheme	-	-
A	P.F. C. Urban Distribution	91	97
B	MIDC Interest free Loan Scheme	16	16
C	Evacuation	7	3
D	Evacuation wind Generation	-	0
8	R E Dist. (RE/ND)	-	-
A	DPDC/Non Tribal	77	102
B	DPDC/SCP	23	31
C	DPDC TSP + OPTSP	42	40
D	RE	19	18
9	JBIC	1	9
10	Backlog	294	358
11	Single Phasing	42	17
12	Agricultural Metering	-	-
13	New Consumer	-	-
14	ERP	0	-
	<b>Total</b>	<b>710</b>	<b>789</b>

3.7.3 The Commission observed some deviations from the in-principle approval and directed MSEDCL to submit the actual year-wise phasing of capital expenditure

and capitalisation for each of the schemes, the reasons for excess capitalisation, if any, and the benefits accrued in each of the capital expenditure schemes.

3.7.4 MSEDCL submitted the required information in reply to the queries raised by the Commission. The Commission noticed that there have been incidences of cost over-run in few of the DPR schemes. The Commission also noticed that the total over-run in costs against the approved capitalisation was Rs.66 crore. However, MSEDCL provided the reasons for such cost over-run and the Commission has found the reasoning provided to be satisfactory. Therefore, the Commission approves capitalisation as submitted by MSEDCL for FY 2010-11.

3.7.5 MSEDCL submitted that the capitalisation for Non-DPR schemes was Rs. 789.27 crore in FY 2010-11, which works out to 20.35% of DPR schemes. The Commission in its APR Order of FY 2008-09 for MSEDCL had ruled that the total capitalisation on non-DPR schemes in any year shall not exceed 20% of that of DPR schemes. However, in this case, the percentage of non-DPR schemes to the DPR schemes is marginally above 20%. The Commission in its APR Order observed that, for FY 2010-11, Rs. 189 crore of capitalisation from Non-DPR schemes (~23% of the capitalisation on account of non-DPR schemes) was on account of energisation of agricultural pumps in backlog schemes and observed the following,

*“However, in the present case, the Commission observed that out of the total capital investments in Non-DPR schemes, Rs. 189 crore was for energisation of agriculture pumps in the backlog schemes, which have been funded through grant from the Government of Maharashtra.”*

3.7.6 Taking into consideration this fact, the Commission is allowing the entire capitalisation of Non-DPR schemes of MSEDCL for FY 2010-11. The capitalisation approved for FY 2010-11 is as below:

**Table 24: Capitalisation for FY 2010-11**

(Rs. crore)

Particulars	APR	Actual	Approved after Truing up
DPR schemes	2,723.50	3,877.92	3,877.92
Non-DPR schemes	556.26	789.27	789.27
<b>Total capitalization</b>	<b>3,279.76</b>	<b>4,667.19</b>	<b>4,667.19</b>

3.7.7 In addition to the above, assets capitalised but not forming part of any specific scheme, amounting to Rs. 147 crore as claimed by MSEDCL, have been allowed by the Commission. However, as MSEDCL has considered the impact of these assets only on depreciation and not on interest and return on equity computation, the Commission has also considered the impact of these assets on depreciation only.

### 3.8 Depreciation for FY 2010-11

- 3.8.1 The depreciation for FY 2010-11 was approved at Rs. 568 crore in the previous APR Order in Case No. 100 of 2011. In its present Petition, MSEDCL has claimed depreciation of Rs. 660 crore for FY 2010-11.
- 3.8.2 In the previous APR Order, the Commission approved an average depreciation rate of 3.80% as against 3.89% submitted by MSEDCL. The Commission in its APR Order had recomputed the depreciation rate after disallowing depreciation for assets which have been depreciated more than the maximum permissible amount. MSEDCL, in its submission in its Petition, stated the following:
- “MSEDCL submits that although the opening GFA for FY 2007-08 has been adjusted in line with the direction of Hon’ble Commission i.e. taken as per Audited closing GFA of FY 2006-07, corresponding adjustments in the accumulated depreciation was not carried out by MSEDCL in the subsequent filings, which resulted into negative net assets in certain blocks of fixed assets. Considering this fact, MSEDCL performed the reallocation of depreciation reserve on proportionate basis as per the asset class of opening GFA for FY 2007-08 as submitted in the APR of FY 2007-08 Petition and revised accumulated depreciation has been calculated accordingly and considering the revised depreciation reserves for FY 2007-08, MSEDCL revised the Form 4 for FY 2007-08, FY 2008-09, FY 2009-10. Accordingly MSEDCL has arrived at the current submission of Assets and Depreciation for FY 2010-11.”*
- 3.8.3 MSEDCL submitted that the adjustments in accumulated depreciation were not carried out by MSEDCL in filings from FY 2007-08, and has hence recomputed the same from FY 2007-08. However, MSEDCL did not provide the details of the computation and adjustments carried out since FY 2007-08. The Commission sought this information from MSEDCL and the same was later provided by MSEDCL.
- 3.8.4 The Commission noticed that in the submission made on the revision of accumulated depreciation, MSEDCL had checked and adjusted for assets that have depreciated to the extent of 90% of the GFA, which is the maximum permissible depreciation limit under the Tariff Regulations, 2005.
- 3.8.5 Therefore, for FY 2010-11, the Commission has considered the average depreciation rate as submitted by MSEDCL. However, since the opening GFA as considered by MSEDCL is different from the opening GFA as approved by the Commission, the approved depreciation is accordingly computed.
- 3.8.6 Regarding the addition to GFA for FY 2010-11, MSEDCL submitted that apart from the capitalisation on account of the various schemes as submitted in Form 5.4, there is an additional amount of Rs. 147 crore capitalised on account of assets not belonging to any of the schemes.
- 3.8.7 The Commission has therefore asked MSEDCL to provide the detailed breakup of the assets that were capitalised and the reason for not including the same in any of the schemes. The Commission further enquired about the funding of such additional capitalisation. MSEDCL provided the required details. Further, MSEDCL submitted that the funding of such capitalisation was only with internal accruals as there were no loans taken from any external agency/ bank. The Commission has hence considered MSEDCL’s claim in this regard.

- 3.8.8 MSEDCL has not claimed any amount under AAD for FY 2010-11. Since the actual repayment is lower than the depreciation amount approved. Accordingly, the Commission has not approved any amount under AAD for FY 2010-11. The opening balance of GFA for FY 2010-11 has been considered the same as the revised closing balance of GFA for FY 2009-10 (after adjusting for additional capitalisation approved for FY 2008-09). Accordingly, the Commission approves depreciation for FY 2010-11 as shown below.

**Table 25: Depreciation for FY 2010-11***(Rs. crore)*

Particulars	APR Order	As submitted by MSEDCL	Approved after final Truing up
Opening GFA	13,296.45	15,687.04	14,503.97
Addition to GFA during the year	3,279.75	4,814.22	4,814.22
Retirement of assets during the year	-	(1.61)	(1.61)
Closing GFA	16,576.20	20,499.65	19,316.57
Depreciation	568.01	659.99	616.83
Depreciation (as a % of Average GFA)	3.80%	3.65%	3.65%

### 3.9 Interest expenses

- 3.9.1 The Commission, in its APR Order dated 30 December, 2011, had approved interest expenses of Rs. 340 crore after considering the interest on debt corresponding to capitalised assets only. MSEDCL submitted that the actual net interest expense on long-term loans in FY 2010-11 was Rs. 481 crore. The actual loan addition during FY 2010-11 reported by MSEDCL was Rs. 3,597 crore.
- 3.9.2 In its Petition, MSEDCL did not submit the amount of consumer contribution and grants to the capital expenditure of FY 2010-11. The Commission raised this query and MSEDCL provided details of the funding pattern of capital expenditure for FY 2010-11. The Commission also reconciled the funding pattern from the Audited Accounts of MSEDCL and found it to be accurate.

**Table 26: Funding pattern as per Audited Accounts of MSEDCL***(Rs. crore)*

Sr. No.	Particulars	Amount
1	Consumer contribution (CC)	308.65
2	Grants received during the year	250.19
3	Equity	2,229.03
4	Debt	3,596.76
	Capital expenditure	6,384.64

- 3.9.3 The Commission has considered the funding pattern for capitalisation for FY 2010-11 in the same ratio as that of the capital expenditure. Accordingly total loan addition approved for FY 2010-11 was adjusted based on the ratio of approved capitalisation to actual capital expenditure. The funding pattern for capitalisation for FY 2010-11 based on the ratio is presented below.

**Table 27: Funding pattern of capitalisation for FY 2010-11**

(Rs. crore)

Sr. No..	Particulars	Amount	% of capitalisation
1	Capitalisation approved	4,667.19	100%
2	As a % of capital expenditure	73%	
3	Consumer contribution (CC)	225.62	5%
4	Grants received during the year	182.89	4%
5	Equity	1,629.43	35%
6	Debt	2,629.24	56%

- 3.9.4 However, the Commission has observed that the equity is exceeding 30% of capitalisation. For this reason, the Commission has considered the equity over 30% of capitalisation as normative debt. With the above consideration, the funding pattern approved for capitalisation in FY 2010-11 is as under:

**Table 28: Approved funding pattern for FY 2010-11**

Sr. No..	Particulars	Amount (Rs. crore)	% of capitalisation
1	Capitalisation approved	4,667.19	100%
2	Consumer contribution (CC)	225.62	5%
3	Grants received during the year	182.89	4%
4	Equity	1,277.60	27%
5	Debt	2,981.07	64%

- 3.9.5 The interest rate for the long-term loans has been considered as per the actual effective interest rate of MSEDCL for FY 2010-11, arrived by dividing the gross interest expense by the average balance of opening and closing loans. This interest expense has computed as 10.4%. Moreover, the repayment has been considered equal to the depreciation allowed for FY 2010-11. In this regard, it may be noted that the Tariff Regulations of the Commission requires repayment to be considered as equal to depreciation allowed. The relevant portion of the Tariff Regulations, 2005 are quoted below.

*“The loan capital calculated using the normative debt:equity ratio under Regulation 61 above shall be assumed to be repaid each year based on a normative repayment schedule:*

*Provided that the amount of such normative repayment for a year shall be equal to the amount of depreciation on the fixed asset to which such loan relates:*

*Provided further that where the outstanding normative loan balance is less than the amount of normative loan repayment calculated as above, the*

*repayment shall be assumed to be equal to the outstanding normative loan balance and no further amount shall be permitted on account of such loan..”*

- 3.9.6 The summary of the interest expenses for long-term debt approved for FY 2010-11 is as follows:

**Table 29: Interest on long-term debt for FY 2010-11**

(Rs. crore)

Particulars	APR Order	Actual	Approved after final Truing up
Op. Balance	3,036.74	5,133.86	3,431.21
Additions	2,005.78	3,596.76	2,981.07
Repayments	(568.01)	(559.82)	(616.83)
Cl. balance	4,474.51	8,170.81	5,795.45
Gross interest expense	379.30	693.12	480.67
Less: IDC	(39.49)	(212.49)	-
Net Interest expense	339.82	480.63	480.67
Average interest rate (%)	10.1%	10.4%	10.4%

### 3.10 Interest on working capital and consumers' Security Deposits and Other Interest and Finance Charges

- 3.10.1 MSEDCL submitted that the actual working capital interest incurred was Rs. 199 crore, as compared to zero interest on working capital approved by the Commission in its previous APR Order.
- 3.10.2 It submitted that that the amount of security deposits as reflecting in the books of accounts of MSEDCL is just a notional amount, though it reflects in the Balance Sheet of MSEDCL after the Transfer Scheme, MSEDCL has not actually received this amount in cash from erstwhile Maharashtra State Electricity Board. Therefore, MSEDCL submitted that there was a shortfall in cash needed for working capital.
- 3.10.3 With regard to interest on working capital, the Tariff Regulations, 2005 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 (as per the books of accounts), 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 considered the interest on working capital as NIL for FY 2010-11. However, the difference between normative and actual interest on working capital has been considered as a controllable loss and shared between MSEDCL and the consumers in accordance with Regulation 19 of the Tariff Regulations, 2005, as explained later in this Section.
- 3.10.4 MSEDCL submitted that the actual expenditure on security deposit of consumers and other finance charges amounted to Rs. 257 crore, of which Rs. 211 crore is on account of interest on consumer deposits. The Commission verified the same from the Audited Accounts of MSDECL and was found to be accurate. The Commission has allowed Rs. 211 crore for interest on security deposits as submitted by MSEDCL for FY 2010-11.

- 3.10.5 The actual expenditure on other interest and finance charges has been accepted by the Commission as per the Audited Accounts. Thus, the interest on working capital, other interest and finance charges including interest on consumers' security deposit, approved by the Commission for FY 2010-11 works out to Rs. 257 crore.

**Table 30: Interest on Working Capital, Consumers' Security Deposit and other interest and finance charges for FY 2010-11**

(Rs. crore)

Particulars	APR Order	Actual	Allowed after Truing up
Interest on Working Capital		198.76	-
Interest on Security deposit		211.30	211.30
Guarantee charges		14.33	14.33
Finance charges		25.34	25.34
Stamp duty		5.93	5.93
Service fee		0.00	0.00
Total Other Interest and finance charges	295.80	455.66	256.90

### 3.11 Incentives and Discounts

- 3.11.1 In its Petition, MSEDCL submitted that the incentives and discounts paid/allowed to consumers during FY 2010-11 were Rs. 143 crore, as compared to the Rs. 132 crore approved by the Commission in the APR Order. This amount was verified with Schedule-20 of the Audited Accounts of MSEDCL, where incentives/discounts are shown as Rs. 143 crore. However, the amount claimed by MSEDCL also includes an amount of Rs. 0.22 crore paid as incentive to distribution franchisee. MSEDCL has also not provided any details as to what this amount pertains to. Since, this expense does not form a part of the regulatory accounts; the Commission has not accepted the claim of MSEDCL in this regard. The Commission therefore approves Rs. 142.62 crore as Incentives and Discounts for FY 2010-11, as shown in the Table below:

**Table 31: Incentives/Discounts for FY 2010-11**

(Rs. crore)

Particular	APR Order	Actual	Allowed after Truing up
Incentives/Discounts	132.31	142.84	142.62

### 3.12 Other expenses

- 3.12.1 MSEDCL submitted that the "Other expenses" for FY 2010-11 was Rs. 15.43 crore as against the approved amount of Rs. (16) crore.
- 3.12.2 The Commission examined the break-up of Other Expenses and observed that MSEDCL claimed expenses under some heads which do not form a part of the regulated accounts. Therefore, the Commission has also not allowed the expenses under Intangible asset written off, Non moving items written off, and Small and low value write off / scraped since they do not form a part of the regulated



accounts. Accordingly, the Commission has approved Other expenses as summarised below.

**Table 32: Other expenses for FY 2010-11**

(Rs. crore)

Particulars	APR Order	Actual	Allowed after Truing up
Interest to suppliers / contractors		-	-
Compensation for injuries, death and damages to staff		1.43	1.43
Compensation for injuries, death and damages to outsiders		4.93	4.93
Interest on Staff Welfare Fund		2.17	2.17
Bad debts w/off dues from consumers		-	-
Intangible asset written off		5.51	-
Non moving items written off		1.11	-
Write off of deferred revenue expenditure		-	-
Small and low value write off / scraped		0.06	-
<b>Other expenses (Total)</b>	<b>(16)</b>	<b>15.21</b>	<b>8.53</b>

### 3.13 RLC Refund

- 3.13.1 MSEDCL submitted that it had refunded a total amount of Rs. 521 crore to the consumers in FY 2010-11. In the previous APR Order dated 30 December, 2011, the Commission had considered the amount of Rs. 519 crore towards RLC refund in FY 2010-11. However MSEDCL submitted that it has actually paid Rs. 521 crore as RLC refund for FY 2010-11.
- 3.13.2 In Schedule-19 of its Audited Accounts, the expenditure due to refund of RLC is shown as Rs. 516.03 crore. MSEDCL further submitted that the claimed amount also included Rs. 4.65 crore paid to the Bhiwandi DF, which the franchisee had refunded to the consumers falling under its franchised area. To show evidence that the RLC refund has been actually paid to the Bhiwandi franchisee, MSEDCL submitted the audit report of the franchisee showing the amount refunded over the period.
- 3.13.3 The Commission enquired as to why this amount was not reflected in the Audited Accounts of FY 2010-11. The Commission's query and MSEDCL's reply in this regard is as follows:

#### Commission's query

*"47) MSEDCL needs to provide the reasons why the RLC refund and ASC refund for FY 2010-11 of the distribution franchisee is not shown in Audited Accounts. MSEDCL needs to show where the impact of such refund if captured in the Audited Accounts.*

**MSEDCL Reply:**

*MSEDCL submits that the refund of RLC and ASC get adjusted in the invoice and MSEDCL has already submitted the necessary details about RLC Refund and ASC Refund from Torrent Power along with the MSEDCL invoices in reply to the data gap raised by the Hon'ble Commission. MSEDCL submits that since the refund gets adjusted in invoice only, the refund does not get reflected in Annual Accounts."*

- 3.13.4 It is clear from MSEDCL's submission that the adjustment of RLC refund is done when raising the bill to the distribution franchisee and hence, as a result the revenue billed to the distribution franchisee is lower by the adjusted amount. The Commission observes that since the adjustment to the RLC refund is already made in the revenue billed to the DF, it resulted in lower revenue for MSEDCL. MSEDCL has not been able to clarify as to why such amount would not be reflected in the audited statements if the invoice is adjusted. If the RLC refund was not adjusted in the revenue of MSEDCL, MSEDCL would have recognised higher revenue from the DF.
- 3.13.5 Since, the effect of RLC refund is already recognised in the revenue, which is captured in the Audited Accounts, the Commission is not allowing the amount of RLC refund claimed for RLC refund to the distribution franchisee area, as it would result in recognising the refund twice. The Commission has accepted the claim of MSEDCL on RLC refund to other consumers in its distribution area as claimed for FY 2010-11.

**Table 33: RLC refund for FY 2010-11***(Rs. crore)*

<b>Particular</b>	<b>APR Order</b>	<b>Actual</b>	<b>Allowed after Truing up</b>
Total RLC Refund as per Annual Accounts		516.03	516.03
Add: RLC Refund (Bhiwandi DF)		4.65	-
<b>Total RLC Refund</b>	<b>519.21</b>	<b>520.68</b>	<b>516.03</b>

**3.14 ASC Refund**

- 3.14.1 In the APR Order for FY 2010-11, the Commission had approved an ASC refund to the tune of Rs. 212.30 crore for FY 2010-11. MSEDCL reported that the ASC refund for FY 2010-11 was Rs. 212.54 crore, of which Rs. 0.94 crore was on account of ASC refund for the Bhiwandi Distribution Franchisee.
- 3.14.2 The expenditure on account of ASC was verified from Schedule-19 of the Audited Accounts submitted by MSEDCL and was found to be Rs. 211.64 crore.
- 3.14.3 To show evidence that the ASC refund has been actually paid to the Bhiwandi franchisee, MSEDCL submitted the audit report of the franchisee showing the amount refunded over the period.

- 3.14.4 Similar to the case with RLC, the Commission enquired as to why the ASC amount refunded through the Bhiwandi franchisee was not reflected in the Audited Accounts of FY 2010-11. MSEDCL replied that the adjustment of ASC refund is done when raising the bill to the distribution franchisee and hence, the revenue billed to the distribution franchisee is lower by the ASC amount. The Commission observes that since the adjustment to the ASC refund is already made in the revenue billed to the DF, it resulted in lower revenue for MSEDCL. If the ASC refund was not adjusted in the revenue of MSEDCL, MSEDCL would have recognised higher revenue from the DF.
- 3.14.5 Since, the effect of ASC refund is already recognised in the revenue, which is captured in the Audited Accounts, the Commission is not allowing the amount of ASC refund claimed for ASC refund to the distribution franchisee area, as it would result into recognising the refund twice. The Commission has accepted the claim of MSEDCL on ASC refund to other consumers in its distribution area as claimed for FY 2010-11.

**Table 34: ASC refund for FY 2010-11***(Rs. crore)*

Particular	APR Order	Actual	Allowed after Truing up
ASC refund (excluding to Bhiwandi consumers)		211.64	211.64
ASC refund to Bhiwandi DF		0.90	-
Total ASC refund	212	212.54	211.64

### 3.15 Provision for Bad Debts

- 3.15.1 MSEDCL submitted that the provision made for bad debts was Rs. 499 crore for FY 2010-11. MSEDCL's provision amounts to 1.5% of the revenue billed during FY 2010-11. The Commission verified the same from Schedule-19 of the Audited Accounts of MSEDCL and found it to be accurate. In its APR Order, the Commission had disallowed the provision for bad debts for revenue from sale of ZLS power. MSEDCL, in its Petition submitted that ZLS is also an integral part of its revenue and cannot be separated for the purpose of provision for bad debts.
- 3.15.2 The Commission notes the concerns of MSEDCL. However, the ZLS scheme was introduced by MSEDCL for the consumers in its six divisional headquarters. MSEDCL proposed the scheme as revenue neutral, i.e. the normal revenue and costs pertaining to the ARR were to remain unaffected by this proposed scheme. The concept was to extend benefit of withdrawal of load shedding to the consumers in the revenue headquarters against levy of additional charges pertaining to cost of additional power purchase. Therefore, the scheme was introduced for a set of specific consumers, keeping it out of the purview of the ARR determination in accordance with the Tariff Regulations, 2005. Therefore, any mechanism introduced by the licensee to a select set of consumers or for specific geographic areas not covering the entire area of supply cannot be

considered under the normal ARR and Tariff determination. For the purpose of Truing up, the Commission is not considering the revenue from sale of ZLS power. Accordingly, the Commission approves the provision for bad debts at 1.5% of the actual revenue (excluding ZLS) for FY 2010-11, which works out to Rs. 477 crore.

**Table 35: Provision for Bad debts for FY 2010-11**

(Rs. crore)

Particulars	APR Order	Actual	Allowed after Truing up
Income billed (Revenue excluding ZLS)	30,964	31,767	31,767
Bad debts	443	499	477
<i>Bad Debts Provision as % of income billed (excluding ZLS revenue)</i>	<i>1.50%</i>	<i>1.57%</i>	<i>1.50%</i>

### 3.16 Contribution to Contingency Reserves

3.16.1 MSEDCL submitted that the contribution to contingency reserves for FY 2010-11 has been considered as Rs. 29 crore, in accordance with the Tariff Regulations, 2005. The Tariff Regulations, 2005 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.

3.16.2 MSEDCL submitted that it has made the investment in “9.45% PFC 2026 bonds” on 27 September, 2011. The Commission verified the amount from the Profit & Loss statement of the Audited Accounts and found the amount to be accurate. The Commission further sought documentary evidence from MSEDCL to confirm that the contingency reserve has been invested in the approved securities. In reply, MSEDCL submitted documentary evidence to prove that the contingency Reserve amounting to Rs. 29 crore had been invested in prescribed securities.

3.16.3 Accordingly, the Commission approves Rs. 29 crore based on the Audited Accounts and documentary proof submitted by MSEDCL in this regard.

**Table 36: Contribution to Contingency Reserve for FY 2010-11**

(Rs. crore)

Particular	APR Order	Actual	Allowed after Truing up
Contribution to Contingency reserves	33	29	29

### 3.17 Prior Period Charges

3.17.1 MSEDCL submitted that net prior period credits/ (charges) amounted to Rs. 311 crore for FY 2010-11. The Commission verified this amount from Schedule-21 of the Audited Accounts for FY 2010-11 and found the amount to be accurate.

3.17.2 Among the various prior period credits, there was an item under the head “Other excess provision”, which amounted to Rs. 214.84 crore. The Commission asked MSEDCL to provide details on what this amount pertained to. MSEDCL in its

reply, submitted that the amount shown is due to the adjustment of billing with Tata Power Company (TPC). MSEDCL's submission in this regard is quoted below.

*“The books of accounts of MSEDCL (Debtors for sale of power to Tata Power Co. (TPC)) showed debit balance of Rs. 247.47 crore i.e. receivable from TPC. However, after adjustment of all bills, there was no outstanding amount from TPC. . Therefore, the account Debtors –TPC was verified in detail and after scrutiny the following facts were revealed-....*

.....

*5. The amount received under IBSM mechanism for UI charges for the period Oct 06 to May 2007 is accounted as Receivable UI charges under Power Purchase cost. However, the sale power of to TPC for the period Oct 06 to May 2007 remained to be withdrawn.*

*6. Thus, it could be seen that the bills for the period from Dec 1998 to Sep 2006 were revised and as a result Rs. 33.73 crore were payable by MSEDCL. As such, there is no outstanding amount from TPC for the period up to Sep 2006. Also, the bills from Oct 2006 to May 2007 required to be withdrawn as the same were considered under IBSM UI charges.*

*7. Therefore, it was concluded that the entire arrears amount of Rs. 247.47 crs., shown in the account Debtors for Sale of power to Tata Power Co. Ltd., was Fictitious and hence required to be withdrawn.”*

- 3.17.3 MSEDCL submitted that the revenue from sale of power for the year FY 2006-07, which was approved by the Commission, considered an amount of Rs. 214.84 crore under revenue from sale of power to Tata Power Company (TPC) and that later, during scrutiny of accounts of FY 2010-11 that there was no amount to be received from Tata Power Company, since the entire arrears amount of Rs. 247.47 crore, shown in the account Debtors for Sale of power to Tata Power Co. Ltd., was fictitious and hence required to be withdrawn.
- 3.17.4 The Commission approved an amount of Rs. 18,863.78 crore as the revenue from sale of power in Case No. 72 of 2007. This was in line with the Revenue from Sale of Power as reflected in the Audited Accounts of FY 2006-07. In those accounts, the Commission noticed that the revenue from sale of power under “Tata” is shown as Rs. 261.22 crore. Since the revenue of Rs. 214.84 crore which was earlier approved in FY 2006-07 was fictitious, the Commission is allowing the amount of Rs. 214.84 under prior period expenses for FY 2010-11, since the revenue did not actually accrue to MSDECL.
- 3.17.5 MSEDCL also claimed an amount of Rs. 35.11 crore (Rs. 40.82 crore under “Depreciation under provided” and Rs. (5.71) crore under “Excess provision for depreciation”. MSEDCL submitted that such provision was due to additional capitalisation identified in previous years. The Commission asked MSEDCL through letter dated 28 June, 2012 to furnish the details on which schemes these additional capitalisation pertains to and the year for which such additional capitalisation was identified. MSEDCL responded, stating that:

“The details of the asset –class wise , scheme-wise and year-wise which were capitalized in the current year, but actual capitalization occurred in previous years, are being collected from the Circles/Divisions since at Corporate office only consolidation of Accounts is done and all the data is available at field offices only. The information will be submitted shortly after receipt of the information from the Circles/Divisions, which may not be possible immediately.”

- 3.17.6 The interest on loans would also depend on the capitalisation details, which are yet to be provided by MSEDCL. Since the Commission has not received the details of capitalisation adjusted for prior periods, the Commission has not been able to consider the claim of MSEDCL for any excess/ short provision for interest and finance charges in the present Order.
- 3.17.7 The Commission has also not accepted the claim for prior period operating, R&M and administrative expenses as they are controllable factors, and approved to MSEDCL as per the principles set out in all the previous Tariff Orders in the first control period.
- 3.17.8 Given below is the summary of prior period charges approved by the Commission for FY 2010-11.

**Table 37: Prior period expenses for FY 2010-11**

(Rs. crore)

Particulars	APR Order	Actual	Allowed after Truing up
Receipts from consumers	No prior period income/ expenses approved in the APR Order	47.93	47.93
Interest income		1.79	1.79
Excess provision for depreciation		5.71	-
Excess provn for interest and finance charges		11.04	-
Other excess provision		(214.84)	(214.84)
Other Income		25.78	25.78
Sub-total of Income		(122.59)	(139.34)
Short provision for power purchase		(12.02)	(12.02)
Operating Expenses		1.60	-
Employees Costs		-	-
Depreciation under provided		40.82	-
Interest and other charges		3.71	-
Administration Expenses		(0.42)	-
Adjustment due to concession granted to powerloom consumers		1.13	1.13
Material related expenses		3.62	-
Adjustment to past billing		149.62	149.62
Sub-total of expenses		188.06	138.73
Net prior period credits/(charges)	310.65	278.07	

### 3.18 Return on Equity (RoE)

- 3.18.1 MSEDCL submitted that the equity portion of the capital expenditure during FY 2010-11 was Rs. 2,229 crore. Based on the approved funding pattern discussed in the interest expenses section, the equity portion of capitalisation has been considered as Rs. 1,629 crore, which is the same as submitted by MSEDCL.
- 3.18.2 In its original Petition filed on 24 February, 2012, MSEDCL had not considered the effect of deferred tax asset (DTA) and deferred tax liability (DTL) as specified in the Tariff Regulations, 2005. The Commission asked MSEDCL to consider the impact of deferred tax assets and liabilities as per the provisions of the Tariff Regulations, 2005. In response to the Commission's query, MSEDCL revised the computation of return on equity taking into account the effect of deferred tax assets and liabilities.
- 3.18.3 MSEDCL has reduced the DTAs from the opening balance of regulatory equity for FY 2010-11, since there was DTAs amount at the end of FY 2010-11. MSEDCL further, added the amount of DTLs to the equity portion of capitalisation during the year, since there was DTLs outstanding at the end of FY 2010-11.
- 3.18.4 The Tariff Regulations, 2005 provide for adjustment for deferred tax assets and liabilities only on the opening balance of equity as on 1 April, 2004. The relevant extract of the Regulations is provided below.

*“63.1.1 The Distribution Licensee shall be allowed a return at the rate of 16 per cent per annum, in Indian Rupee terms, on the amount of approved equity capital:*

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

*Explanation II – for the purpose of this Regulation, the amount of equity capital as at April 1, 2005 shall be computed as follows:*

*Equity capital as at April 1, 2004 as determined by the Commission, in accordance with Explanation I above, plus.*

*Equity capital portion of the allowable capital cost, for the investments put to use in distribution business, calculated in accordance with Regulation 60 and Regulation 61 above, for the year ending March 31, 2005..”*

- 3.18.5 The adjustment for deferred tax assets and liabilities need to be considered on for determination of the opening level of equity as on 1 April, 2004. The Hon'ble ATE in Appeal No. 191 of 2009, in the case of MSPGCL, ruled the following on deferred tax liabilities.

“11.4. We feel that deferred tax liability of the Appellant is not created in perpetuity. Thus, in view of the explanation given by us explaining the deferred tax liability in para 11.2 above, we fully agree with the reasoning given by the State Commission in the impugned order for not including the deferred tax liability in equity capital. This point is accordingly decided against the Appellant.”

- 3.18.6 The Commission has therefore not considered either deferred tax assets or deferred tax liabilities for FY 2010-11. The return on equity approved for MSEDCL for FY 2010-11 is as given below.

**Table 38: Return on Equity for FY 2010-11**

(Rs. crore)

Particulars	APR Order	As per MSEDCL's claim	Allowed after Truing up
Regulatory equity at beginning of year	3,320.12	3,747.24	3,508.91
Reduction due to deferred tax assets (reduced at the beginning of the year)	-	(357.39)	-
Revised regulatory equity at the beginning of the year	3,320.12	3,389.85	3,508.91
Equity portion of capitalisation (excluding grants and consumer contribution)	983.93	1,629.43	1,277.60
Addition in equity due to deferred tax liability (added at the end of the year)	-	105.69	-
Regulatory equity at the end of the year	4,304.04	5,124.97	4,786.51
Return on regulatory equity at beginning of the year (@16%)	531.22	542.38	561.43
Return on equity portion of capital expenditure capitalised (@8%)	78.71	133.13	102.21
Total return on regulated equity	609.93	675.50	663.63

### 3.19 Income Tax

- 3.19.1 In its present Petition, MSEDCL submitted that it has paid Rs. 126 crore towards income tax in FY 2010-11, and submitted the income tax challans for the same in the proceedings in Case No. 100 of 2011. However, the Commission had observed the following in Case 100 of 2011.

“The Commission further obtained from MSEDCL the details of its income tax computations and relevant correspondences with the Income Tax Department of the Govt. of India. Analysis of such details revealed that some amount had been paid by MSEDCL on account of delayed payment of taxes. The Commission



observed that MSEDCL had to pay a total interest of Rs. 6.37 crore for 4 Assessment Years due to delay in making the payment of TDS as per the Income Tax Act, 1961. The interest was charged because MSEDCL did not deduct TDS while making wheeling and transmission charges payment to MSETCL and PGCIL. Therefore the said expenses have been disallowed by the Commission as MSEDCL failed to make the statutory payments within the time period specified by the Income Tax Authority.

4.19.3 For the remaining tax payment of Rs.119.62 crore, it was observed that MSEDCL had not deducted the grants and consumer contribution while calculating the depreciation as per the Income Tax Act, 1961. Hence the Income Tax Department recomputed the said depreciation after deducting the grants and consumer contribution from Fixed Assets, and reassessed MSEDCL's income tax liabilities. Due to this, there was increase in the profit of MSEDCL and it had to pay income tax on the increased profit.

4.19.4 Out of Rs. 119.2 crore, MSEDCL has not provided the break-up of the income tax amount, interest and penalty charged by the Income Tax Department. Therefore, the Commission is not approving 20% of this amount till MSEDCL submits further details to the Commission. Accordingly, the Commission approves Rs. 95.7 crore on account of income tax for FY 2010-11."

3.19.2 In its Petition in Case No. 19 of 2012, MSEDCL submitted that the amount of Rs. 126 crore includes both the interest and the income tax liability. MSEDCL stated that:

"2.15.4 MSEDCL hereby submits that it has paid the amount of income tax of Rs. 126 crore for the following two issues:-

- i) Rs. 8.41 crore (not Rs. 6.37 crore as stated by Hon'ble Commission) towards interest levied u/s. 201A of the Income Tax Act, 1961; and
- ii) Rs. 117.58 crore (not Rs. 119.62 crore as stated by Hon'ble Commission) towards the tax liability arising due to higher claim of depreciation."

2.15.5 The Hon'ble Commission has disallowed the amount stating that MSEDCL has delayed payment of taxes. However, MSEDCL submits that the issue of Non-deduction of tax at sources on payment of wheeling and transmission charge is a countrywide problem faced by all Distribution Utilities and not just MSEDCL. Various litigations on this issue are going on throughout the country in front of various Forums...

...2.15.7 Moreover, unless and until the Assessment Order and Demand Notice are served on MSEDCL, it cannot make the payment. The said payment of Rs. 8.41 crore has been made by MSEDCL within the stipulated time for payment in the Demand Notice. Therefore the said payment is not on account of delayed payment of taxes."

3.19.3 MSEDCL further submitted that out of the amount of Rs. 117.58 crore, Rs. 33.58 crore was paid as interest towards delay in payment of income tax. The income tax

- payment of Rs. 117.58 crore does not involve any penalty component. As per the Petition and reasoning mentioned in the Petition the said interest was paid because there was no clarity on the TDS to be deducted on the Wheeling and Transmission Charges and which was also an issue for all the other distribution utilities in the country.
- 3.19.4 The Commission is of the view is that since the issue related to TDS to be deducted on Wheeling and Transmission charges got resolved by the Finance Ministry after a delay, all the distribution utilities in the country had to bear the interest expenses. Hence, the Commission has not deducted any expenses on this account.
- 3.19.5 In case of interest of Rs 33.58 crore, the Commission is of the view that the company is incorporated as per the Companies Act and has to follow the Accounting Standards prescribed by the Company's Act and also by the Institute of Chartered Accountant of India. As per the Accounting Standard 12, accounting for Government Grants; there are two methods for the accounting of grants. Under the first method, the grant is shown as a deduction from the gross value of the asset concerned in arriving at its book value. Under the second method, grants related to depreciable assets are treated as deferred income which is recognized in the profit and loss statement on a systematic and rational basis over the useful life of the asset.
- 3.19.6 Further as per the AS-12, the company has to mention the method of accounting followed for Government grants, but the same is not been submitted in the Petition. Hence, the Commission's view is that MSEDCL had failed to follow the said policy due to which it had to pay interest. The Commission is of the view that the interest burden due to delayed payment on income tax should not fall on the consumers of the license area. Hence the Commission has disallowed the interest expenses of Rs. 33.84 crore.
- 3.19.7 Therefore, the Commission approves the income tax for FY 2010-11 after deducting the amount of Rs. 33.84 crore paid as interest expenses for delayed payment of income tax.

**Table 39: Income tax for FY 2010-11***(Rs. crore)*

Particulars	APR Order	As per MSEDCL's claim	Allowed after Truing up
Income tax	96	126	92

### 3.20 Non Tariff Income

- 3.20.1 MSEDCL submitted that non-Tariff income for FY 2010-11 was Rs. 1,252 crore as against Rs. 1,361 crore approved in the APR Order. It was observed that, 68.4% of the Non Tariff income was on account of receipt of delayed payment charges and interest on arrears. The Commission verified the same from Schedule – 15 of the Audited Accounts of MSEDCL and therefore approves Rs. 1,252 crore as non-Tariff income for FY 2010-11.

**Table 40: Non Tariff income for FY 2010-11***(Rs. crore)*

Particular	APR Order	Actual	Allowed after Truing up
Non Tariff income	1,361	1,252	1,252

**3.21 Income from wheeling charges**

- 3.21.1 MSEDCL submitted that the income from wheeling charges was Rs. 16 crore. The same was verified from Schedule-14 of the Audited Accounts of MSEDCL and found to be accurate. Accordingly, the Commission approves the same.

**Table 41: Income from wheeling charges for FY 2010-11***(Rs. crore)*

Particular	APR Order	Actual	Allowed after Truing up
Income from wheeling charges	17	15.98	15.98

**3.22 Revenue from sale of power**

- 3.22.1 MSEDCL has submitted that the revenue from sale of power in FY 2010-11 was Rs. 33,222 crore as against Rs. 30,964 crore approved by the Commission in the previous APR Order.
- 3.22.2 MSEDCL submitted that the major reason for a deviation between the revenue in the APR Order and the actual revenue is due to an amount of Rs. 1,627 crore of unbilled revenue. The reconciliation between the provisional revenue from sale of power and the audited revenue from sale of power is as shown below.

**Table 42: Reconciliation between provisional and audited revenue for FY 2010-11 as reported by MSEDCL***(Rs. crore)*

Sr. No..	Particulars	APR Order	Actual	Difference
1	Revenue Billed as per IT	27,319	27,572	(253)
2	Add: Stand by Charges	396	396	0
3	Add: Bhiwandi DF Revenue	748	765	(17)
4	Add: GOM Subsidy (Ag & Powerloom)	2,500	2,800	(300)
5	Add: unbilled Revenue	0	1627	(1627)
6	Add: Misc Charges	0	80	(80)
7	Total	30,964	33,237	(2,273)

- 3.22.3 As per the Audited Accounts submitted by MSEDCL, the revenue is Rs. 33,222 crore, which includes the revenue from ZLS sales and wheeling charges. Out of this revenue, an amount of Rs. 1,455 crore was on account of revenue from sale of

ZLS power. The Commission, has therefore considered the net revenue, after deducting the ZLS revenue from the total revenue, to arrive at 31,767 crore. The approved revenue from sale of power in FY 2010-11 is given below:

**Table 43: Revenue from sale of power for FY 2010-11**

(Rs. crore)

Particulars	APR Order	Actual	Allowed after Truing up
Revenue from sale of power	29,509	31,767	31,767

### 3.23 Sharing of Efficiency Gains & Losses for FY 2010-11 due to Controllable Factors

3.23.1 MSEDCL categorised all the expenditure as uncontrollable and hence, did not compute the gains and losses for the controllable heads of expenditure. The relevant provisions under the Tariff Regulations, 2005, stipulating sharing of gains/losses due to controllable factors states,

*“17.6.2 Some illustrative variations or expected variations in the performance of the applicant which may be attributed by the Commission to controllable factors include, but are not limited to, the following: (a) Variations in capital expenditure on account of time and/ or cost overruns/efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;*

*(b) Variations in technical and commercial losses, including bad debts; (c) Variations in the number or mix of consumers or quantities of electricity supplied to consumers as specified in the first and second proviso to clause (b) of Regulation 17.6.1; (d) Variations in working capital requirements; (e) Failure to meet the standards specified in the Standards of Performance Regulations, except where exempted in accordance with those Regulations; (f) Variations in labour productivity; (g) Variations in any variable other than those stipulated by the Commission under Regulation 15.6 above, except where reviewed by the Commission under the second proviso to this Regulation 17.6. ...*

.....

*19.1 The approved aggregate gain to the Generating Company or Licensee on account of controllable factors shall be dealt with in the following manner: (a) One-third of the amount of such gain shall be passed on as a rebate in Tariffs over such period as may be specified in the Order of the Commission under Regulation 17.10; (b) In case of a Licensee, one-third of the amount of such gain shall be retained in a special reserve for the purpose of absorbing the impact of any future losses on account of controllable factors under clause (b)*

of Regulation 19.2; and (c) The balance amount of gain may be utilized at the discretion of the Generating Company or Licensee.

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

(a) One-third of the amount of such loss may be passed on as an additional charge in Tariffs over such period as may be specified in the Order of the Commission under Regulation 17.10; and

(b) The balance amount of loss shall be absorbed by the Generating Company or Licensee.”

3.23.2 The Commission is of the view that all expenditure and revenue heads cannot be considered as uncontrollable, which would mean that the licensee has no control over any of its activities, particularly when this is a regulated business, and the actual allowable costs have to be passed through to the consumers. The Commission has considered certain controllable expenses and revenue for computing the sharing of gains/losses in accordance with the provisions of Tariff Regulations, 2005, as elaborated in the following paragraphs.

3.23.3 **O&M Expenditure:** The actual A&G and R&M expenditure have been lower than that allowed by the Commission in the APR Order. Not all of these expenses are uncontrollable and hence, the controllable components have been considered as efficiency gain and shared in accordance with the Tariff Regulations, 2005, as reproduced above. One-third of the efficiency gains have been passed on to the consumers through decrease in the Trued up ARR of FY 2010-11. The summary of sharing of efficiency gain is shown in the Table below. Half of the balance amount has to be kept in a special reserve as per the provisions of the Tariff Regulations, 2005, and the balance amount will be kept by MSEDCL for its utilisation at its discretion.

**Table 44: Efficiency gain due to O&M expenses for FY 2010-11**

(Rs. crore)

Sr. No..	Particulars	APR Order	Actual	Allowed after final Truing up	Efficiency Gain/ (Loss)	Efficiency Gain/ (Loss) shared with consumer
1	Administrative & General expenses	268.0	232.0	268.0	36.0	12.0
2	Repair & Maintenance expenses	528.0	514.2	528.0	13.8	4.6

3.23.4 **Interest on Working Capital:** The actual interest on working capital incurred by MSEDCL during FY 2010-11 is Rs. 199 crore, as against 'Nil' normative interest on working capital approved by the Commission. As stated earlier, the Commission has considered the difference between the actual interest on working capital and normative interest, amounting to Rs. 199 crore, as an efficiency loss

and shared the same between MSEDCL and the consumers in accordance with the Tariff Regulations, 2005. Thus, Rs. 66.3 crore (1/3rd of Rs. 198.8 crore) has been passed on to the consumers through increase in ARR. The balance amount of the efficiency loss has to be absorbed by MSEDCL.

**Table 45: Efficiency loss due to Interest on Working Capital for FY 2010-11**

(Rs. crore)						
Sr. No..	Particulars	APR Order	Actuals	Allowed after final Truing up	Efficiency Gain/ (Loss)	Efficiency Gain/ (Loss) shared with consumers
1	Interest on Working Capital	-	198.8	-	(198.8)	(66.3)

- 3.23.5 **Distribution loss achievement:** MSEDCL reported the actual distribution loss in FY 2010-11 as 17.28% against a target of 17.20% as set by the Commission in Case No. 111 of 2009. The Commission has approved distribution loss for MSEDCL during FY 2010-11 at 17.28%. Considering the target distribution loss of 17.2%, there is an under-achievement of 0.08%. Therefore, this efficiency loss has to be shared between MSEDCL and the consumers in accordance with the Tariff Regulations, 2005.
- 3.23.6 Regarding sales to unmetered consumers, the Commission directed MSEDCL to institute a study to determine the correct specific consumption for unmetered agricultural connections based on consumption of metered connections. As per the said directions, MSEDCL is to submit the report containing the findings of such study to the Commission before December 30, 2012.
- 3.23.7 For the purpose of computing the efficiency losses by computing loss of revenue as a result of higher distribution loss, the Commission has considered the distribution loss level as reported by MSEDCL. When MSEDCL submits the final report, the Commission will reconsider sales to unmetered agricultural consumers in FY 2010-11. Based on the findings of the report, the Commission may require to re-compute the sales for this category and accordingly decide the final distribution loss level for FY 2010-11 and make adjustments for sharing of gains/ (losses) for FY 2010-11.
- 3.23.8 In this Order, the Commission has computed the efficiency loss due to under achievement of distribution loss reduction based on the actual average billing rate of MSEDCL in FY 2010-11, as shown in the Table below:

**Table 46: Efficiency loss due to higher distribution losses for FY 2010-11**

Particulars	Unit	Amount
Normative distribution losses	%	17.20%
Actual distribution losses	%	17.28%
Actual energy input	MU	86,170
Normative sales	MU	71,349
Actual sales	MU	71,280

Particulars	Unit	Amount
Approved sales	MU	71,280
Additional/(Lower) sales due to higher distribution loss	MU	(69)
Average billing rate*	Rs/kWh	4.59
Additional/(Lower) revenue due to higher distribution loss	Rs. crore	(31.66)
Efficiency loss to be borne by MSEDCL	Rs. crore	(21.11)
Efficiency loss passed on to consumers	Rs. crore	(10.55)

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

- 3.23.9 In accordance with the above analysis, the sharing of efficiency gains/ (losses) in relation to A&G expenses, R&M expenses, Interest on Working Capital and Revenue will be allowed to pass through to the consumers. The summary of efficiency gains/ losses is as below:

**Table 47: Summary of Efficiency Gain/Loss to be considered in ARR for FY 2010-11**

(Rs. crore)

Sr. No..	Particulars	Amount
1	Administrative & General expenses	(12.01)
2	Repair & Maintenance expenses	(4.60)
3	Interest on Working Capital	66.25
4	Revenue loss (on account of distribution losses)	(21.11)
5	<b>Total addition to ARR</b>	<b>28.54</b>

### 3.24 Aggregate Revenue Requirement and Revenue Gap for FY 2010-11 after Truing up

- 3.24.1 The Aggregate Revenue Requirement for FY 2010-11 after final Truing up is summarised in the Table below.

**Table 48: Aggregate Revenue Requirement and Revenue gap for FY 2010-11**

(Rs. crore)

Sr. No.	Particulars	APR Order	Actuals	Allowed after final Truing up
1	Power Purchase expenses	25,222	25,882	25,882
2	Operation & Maintenance expenses	2,779	2,881	2,931
2.1	Employee expenses	1,895	2,047	2,047
2.1	Deferred expenses for earned Leave encashment as per Commission's order dated 29.06.2008	88	88	88
2.2	Administration & General Expenses	268	232	268
2.3	Repair & Maintenance Expenses	528	514	528

Sr. No.	Particulars	APR Order	Actuals	Allowed after final Truing up
3	Depreciation, including advance against depreciation	568	660	617
4	Interest on long-term loan capital	340	481	481
5	Interest on Working Capital and on consumer security deposits	296	456	257
6	Provisions for bad debts	443	499	477
7	Other Expenses	(16)	15	9
8	Income tax	96	126	92
9	Transmission charges paid to Transmission licensee	1,892	1,892	1,892
10	Contribution to contingency reserves	33	29	29
11	Incentives/Discounts paid to consumers	132	143	143
<b>12</b>	<b>Total Revenue Expenditure</b>	<b>31,784</b>	<b>33,062</b>	<b>32,807</b>
13	Return on equity	610	676	664
<b>14</b>	<b>Aggregate Revenue Requirement</b>	<b>32,394</b>	<b>33,738</b>	<b>33,471</b>
15	Less: Non Tariff Income	(1,361)	(1,252)	(1,252)
16	Less: Income from wheeling charges	(17)	(16)	(16)
17	Add: RLC refund	519	521	516
18	Add: ASC refund	212	213	212
19	Add: Net Prior Period Credit / Charges	-	311	278
20	Effect of sharing of gains/ (losses)	-	-	29
21	Aggregate Revenue Requirement from Retail Tariff	31,747	33,514	33,238
22	Revenue from Sale of Power at Existing Tariff with ZLS	30,964	33,222	33,222
23	Less: Revenue from ZLS Power	1,455	1,455	1,455
24	Add: Revenue from additional sales due to surplus power	-	-	-
<b>25</b>	<b>Net Revenue</b>	<b>29,509</b>	<b>31,767</b>	<b>31,767</b>
<b>26</b>	<b>Revenue Gap</b>	<b>2,238</b>	<b>1,747</b>	<b>1,471</b>



- 3.24.2 Therefore, the Commission approves Rs. 1,471 crore as revenue gap after Final Truing up for FY 2010-11. In its Order in Case No. 100 of 2011, the Commission had approved a revenue gap for FY 2010-11 as Rs. 2,238 crore. Therefore, a further amount of Rs. (767) crore is approved for MSEDCL for FY 2010-11 as shown below.

**Table 49: Revenue gap approved for FY 2010-11**

(Rs. crore)

Sr. No..	Particulars	Amount
1	Revenue gap approved after provisional Truing up for FY 2010-11 in Order dated 30 December, 2011	2,238
2	Less: Revenue gap approved after Final Truing up for FY 2010-11	(1,471)
3	Additional revenue gap approved for FY 2010-11	(767)

#### 4. DETERMINATION OF AGGREGATE REVENUE REQUIREMENT FOR FY 2011-12 and FY 2012-13

##### 4.1 Distribution Loss for FY 2011-12 and FY 2012-13

4.1.1 MSEDCL submitted that it has achieved a significant reduction in distribution losses during recent years. MSEDCL assured that although the efforts to reduce distribution losses shall continue, loss reduction is a slow process and becomes increasingly difficult as the loss levels come down. MSEDCL added that in view of the same it has assumed the distribution losses to come down by 1% in FY 2011-12 and 0.5% in FY 2012-13. MSEDCL has thus projected a distribution loss of 16.27% for FY 2011-12 and 15.77% for FY 2012-13.

4.1.2 The Commission acknowledges MSEDCL's concern that the reduction in distribution loss becomes comparatively difficult to achieve as the distribution losses approach a lower level. The Commission believes that reduction in distribution loss by 1.5% in two years over the current level of 17.28% is an appropriate step towards increasing operational efficiency. It approves the distribution losses for FY 2011-12 and FY 2012-13 as projected by MSEDCL.

**Table 50: Approved distribution losses for FY 2011-12 and FY 2012-13**

Particular	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Distribution loss	16.27%	16.27%	15.77%	15.77%

##### 4.2 Sales for FY 2011-12 and FY 2012-13

###### Sales for FY 2011-12

4.2.1 MSEDCL submitted its sales projection for FY 2011-12 based on actual recorded sales till January 2012 (10 months) and considering a nominal growth rate of 5% over the sales of January, except for the metered agricultural category. For metered agriculture category, MSEDCL has considered a 5% increase on the sale of December, 2011 to arrive at the sales of March 2012, whereas for projecting the sales of February, it has considered a 5% increase over the sales of January.

4.2.2 The Commission observed that in FY 2010-11, the growth in sales in February and March has been only 2% higher than the sales in January. The Commission asked MSEDCL to clarify its approach in this matter. MSEDCL submitted that even though there is little or negative growth in sales in March 2011 in HT Category over February 2011, there has been significant growth in sales in March 2011 in LT Category over February 2011 including Domestic (10%), Non-Domestic (7%), PWW (29%) and Industrial (9%). MSEDCL added that to average out the sales for these two months and considering the beginning of summer season, MSEDCL has considered a nominal growth of 5% for all categories.

4.2.3 Considering MSEDCL's claim of increased power availability and subsequent reduction in load shedding in the recent period and considering the fact that the sales of FY 2011-12 are based on 10 months of actual data, the Commission has

not considered any change in projections at this stage and accepts the sales projections by MSEDCL for FY 2011-12.

### **Sales for FY 2012-13**

- 4.2.4 MSEDCL submitted that it has witnessed a significant growth in sales in the last five years. Since January 2011, MSEDCL has been able to considerably increase the availability of power, which helped it witness a growth of 16% from the period April 2010- September 2010 to April 2011 - September 2011. Increased availability of power resulted in uninterrupted supply and reduced load shedding to majority of consumers, which manifested in considerable increase in the consumption. MSEDCL averred that the additional power has boosted the State's industrial growth and helped it maintain the momentum in the service sector and consistent socio-economic development.
- 4.2.5 MSEDCL stated that the Economic Survey for FY 2010-11 projected the Gross State Domestic Product (GSDP) to grow at 10.5% against 8.7 % the previous year. Industry is expected to grow by 9.1 % while the service sector by 10.9 %. The expected growth in manufacturing sector is 8.6% whereas the construction sector is expected to grow at 11% along with electricity, gas and water supply at 10.4%.
- 4.2.6 According to MSEDCL, the real estate market in Maharashtra has thrived on industrial growth in the State, developing in every segment – commercial spaces, residential apartments and condominiums, retail malls, hotels or special economic zones. Accelerated commercial and residential property development is expected in the State. Construction activities are on the upswing.
- 4.2.7 On the basis of its power procurement plan, MSEDCL expected that in FY 2012-13, the consumers in the State can avail 24X7 supply of electricity. Considering the availability of the surplus power and unrestricted supply, MSEDCL has assumed a higher growth for FY 2012-13. MSEDCL further submitted that due to the Telengana issue, floods in Orissa coal mines and coal shortage at some of the Central Generating Stations, MSEDCL had to resort to load shedding after October 2011. However, MSEDCL felt that it was an exceptional situation and it may not arise again. MSEDCL expects to have sufficient power to cater to its consumers.
- 4.2.8 During FY 2011-12 MSEDCL estimated a huge increase in unmetered agricultural sales. It submitted that 1,50,518 new unmetered agricultural connections with connected load of 13,55,889 HP were added during FY 2011-12 till December 2011.
- 4.2.9 MSEDCL's sales projection for FY 2012-13 is made on the basis of estimated growth rates analysing past trends and expected situation of high availability. The growth rate along with the rationale considered by MSEDCL for projecting sales for FY 2012-13 for major consumer categories is given below.

### **LT Domestic**

- 4.2.10 MSEDCL submitted that this category witnessed a near to double digit growth in the units sold in the last five years and the CAGR between FY 2005-06 and FY 2010-11 was 10.07%. Domestic category (excluding BPL) witnessed a growth of 16% from the period April 2010- September 2010 to April 2011 - September 2011 as it benefited from reduced load shedding. Hence MSEDCL has considered a growth of 20% for FY 2012-13.

- 4.2.11 The Commission observed that the sales growth between H1 of FY 2010-11 and H1 of FY 2011-12 was 14% as per the data submitted by MSEDCL instead of 16% as claimed by MSEDCL. The Commission asked MSEDCL to clarify this discrepancy and also provide the rationale for considering an even higher sales growth of 16% for FY 2012-13. MSEDCL replied that the sales growth for LT Domestic Category excluding BPL between H1 of FY 2010-11 and H1 of FY 2011-12 was 14%. MSEDCL submitted that during the period between H1 of FY 2010-11 and H1 of 2011-12, with increased power availability, the total sales of MSEDCL witnessed a healthy growth of 14%. MSEDCL clarified that this was primarily due to the reduced load shedding. MSEDCL added that additional availability of power to the consumers resulted in uninterrupted supply of power to majority of consumers and hence resulted in considerable increase in the consumption and in turn the sales of MSEDCL.
- 4.2.12 MSEDCL also submitted that the current economic reform undertaken by the State Government has resulted in numerous construction activities in different part of Maharashtra. MSEDCL added that the plan regarding FSI as well as low-income scheme group houses are expected to result in a robust increase in the residential category consumption. MSEDCL further added that the supplies of residential houses are comparatively higher than the demand which may result into upswing in demand of such houses.
- 4.2.13 MSEDCL further submitted that based on the power procurement plan, it is anticipated that the situation will improve within next three-four months and it is expected that in FY 2012-13, the consumers may not be subjected to load shedding as above. It is further expected that in FY 2012-13, the consumers in the State could be availing 24X7 supply except in the areas where there are high DCL losses or the area/consumers which fall under principles and protocols of load shedding. MSEDCL added that considering the past experience of healthy growth of 14% over six months, it expects that sales to LT Domestic will increase significantly and considered a healthy growth rate of 20%.

#### **LT Commercial**

- 4.2.14 MSEDCL has considered a growth of 29% for FY 2012-13 for this category. It witnessed a growth rate of 11.42% between FY 2005-06 and FY 2010-11. Also increased availability since January 2011 helped this category witness a growth of 26% from the period April 2010 - September 2010 to April 2011 - September 2011.
- 4.2.15 The Commission observed that the sales growth between H1 of FY 2010-11 and H1 of FY 2011-12 was actually negative as per the data submitted by MSEDCL instead of 16% as claimed by MSEDCL. The Commission asked MSEDCL to clarify this discrepancy.
- 4.2.16 MSEDCL replied that the growth for the LT Commercial category between April to September 2010 and April to September 2011 was -2% and agreed that it had inadvertently mentioned it as 26%. MSEDCL submitted that during the period April 2009 to March 2010 and April 2010 to March 2011, due to increased power availability, total sales of MSEDCL witnessed a healthy growth of 12%. MSEDCL submitted that it is anticipating a higher growth due to the reasons highlighted in Paragraph 4.2.13 above.

#### **LT Industrial**

- 4.2.17 MSEDCL submitted that sales in this category grew at a rate of 12.49% between FY 2005-06 and FY 2010-11 was. However, MSEDCL has considered a growth of 6% for the LT Industrial category for FY 2012-13.
- 4.2.18 The Commission inquired from MSEDCL as to why it has considered a lower growth rate for this category as compared to the higher five year CAGR. MSEDCL replied that the sales growth rate for LT Industrial including powerloom industry consumption between FY 2005-06 and FY 2010-11 was around 12%. MSEDCL added that the growth rate of 6% mentioned above doesn't include the impact of power loom consumption which needs to be considered in the industrial total consumption. MSEDCL submitted that considering a realistic approach, it has considered sales growth rate of 9% for LT Industrial (which includes Powerloom).

### **HT Industrial**

- 4.2.19 The sales growth rate between FY 2005-06 and FY 2010-11 was 7.33%. HT Industrial category witnessed a growth of about 10% from the period April 2010-September 2010 to April 2011 - September 2011. However, MSEDCL felt that the same growth may further increase due to the additional power availability and proposed night rebate and hence considered a growth of 14% for FY 2012-13.
- 4.2.20 The Commission found that the growth rate in HT Industrial between H1 of FY 2010-11 and H1 of FY 2011-12 was only 5% instead of the 10% claimed by MSEDCL in its Petition. In response to the query raised by the Commission regarding the same, MSEDCL submitted that it has inadvertently mentioned the growth rate as 10% instead of 5.2%.
- 4.2.21 The Commission inquired from MSEDCL as to why it has considered an even higher growth rate of 14% as compared to its inadvertently assumed growth rate of 10%, MSEDCL replied that it is anticipating a higher growth due to the reasons highlighted in Paragraph 4.2.13 above. MSEDCL further submitted that it has proposed to increase the rebate available to industrial consumers for off-peak consumption from 85 paise to 250 paise. MSEDCL added that because of the increased Time of Day (ToD) rebate, it anticipates that the HT Industrial consumers are most likely to utilize this additional rebate and hence considered a higher growth rate of 14%.

### **Agriculture**

- 4.2.22 Sales grew at a rate of 33.36% between FY 2005-06 and FY 2010-11 for LT Metered category. However, MSEDCL submitted that it considered a realistic growth rate of 8% for FY 2012-13. MSEDCL also submitted that overall growth rate between FY 2005-06 and FY 2010-11 for HT category was 8.41%, for LT Category it was 18.21% and for total LT and HT it was 13.17%. Similarly, MSEDCL witnessed healthy growth in metered connected load from 46,07,505 HP in FY 2007-08 to 76,50,990 HP in FY 2010-11, i.e., 18% (3 Year CAGR).
- 4.2.23 MSEDCL considered the following category wise CAGRs for projecting sales for FY 2012-13.

**Table 51: Growth rates considered by MSEDCL for Sales Projection for FY 2012-13**

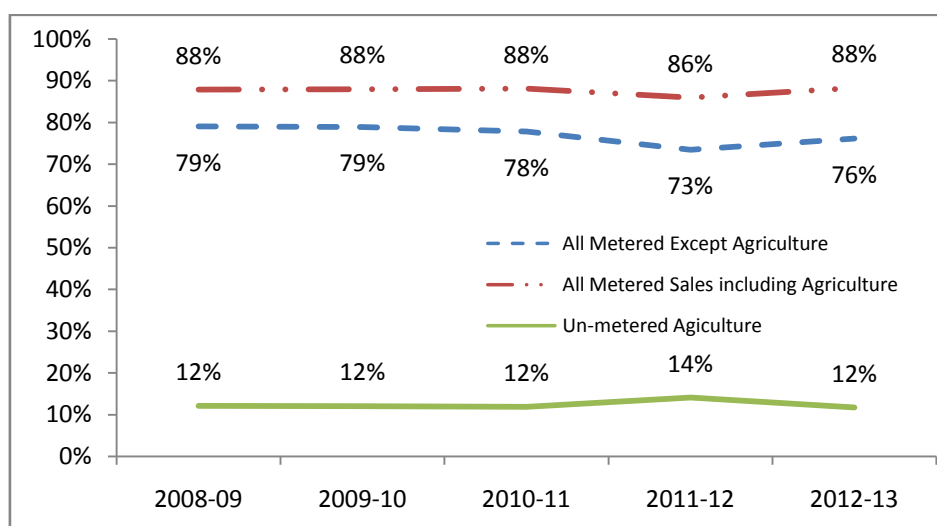
Consumer Category & Consumption Slab	FY 2012-13
HT Category	
HT I – Industry	14%

Consumer Category & Consumption Slab	FY 2012-13
HT II – Commercial	17%
HT – III - Railway Traction	11%
HT IV – PWW	6%
HT V- Agriculture	0%
HT- VI	25%
HT Poultry/SP. AG	24%
LT Category	
BPL	0%
LT I – Domestic	20%
LT II – Non-domestic	29%
LT III – Public Water Works	4%
LT IV – Agriculture	
Unmetered	-7%
Metered	8%
LT V – Industrial	6%
LT VII – Temporary	22%
LT VIII – Adv & Hoardings	34%
LT IX – Crematoriums & Burial Grounds	14%

- 4.2.24 The Commission inquired from MSEDCL as to why it has considered a growth rate of 17% for HT Commercial category for FY 2012-13 even if the actual growth rate in FY 2011-12 was only 6%. MSEDCL replied that the HT Commercial Category has seen a significant growth of 21% in FY 2010-11 over FY 2009-10. MSEDCL added that in FY 2011-12 also, a consistent growth was witnessed even though there was a deficit situation in first half of FY 2011-12. MSEDCL added that based on the above reasons, considering a realistic approach, it has projected the growth rate of this category to be 17%.
- 4.2.25 The Commission observed that MSEDCL has considered a growth rate of 11% for the Railways category in spite of the fact that the growth in this category was only 3.7% in FY 2011-12 over FY 2010-11. MSEDCL submitted that even though the historical sales growth was 4.22% (5 Year CAGR) for railways, there was overall 6% increase on year-on-year basis for FY 2009-10 and FY 2010-11. MSEDCL further submitted that considering a normal increase of 6% and also considering the fact that railways have increased the number of trains, planning for various projects such as new station as well as expansion of stations and higher power availability of MSEDCL, it anticipates the consumption at the stations will increase and hence considered a growth of 11%.
- 4.2.26 Similarly for HT Public Water Works category, the Commission inquired from MSEDCL as to why it has considered a higher growth rate of 6% when the five year CAGR for this category is only 1.6%. MSEDCL submitted that even though the historical sales growth was only 1.6%, MSEDCL has witnessed a growth of 6% in FY 2010-11 over FY 2009-10 for HT PWW category. MSEDCL submitted that considering the last year's growth and anticipated higher power availability, it has considered a growth of 6% for HT PWW category. MSEDCL added that the Abhay Yojana scheme has been introduced through commercial circular No. 163 dated 19 April, 2012 for live & PD PWW and other category of consumers whereby 100% interest and DPC amount as on 31 March, 2012, has been waived

- off and new connections will be released. MSEDCL submitted that in anticipation of a positive response to this scheme, it expects that the connection of certain disconnected PWW consumers will be restored which will result in the growth in the consumption.
- 4.2.27 In its present Petition MSEDCL has proposed new sub categories of consumers in FY 2012-13 under low/ high tension commercial category for Government owned, managed, and operated educational institutions including higher educational institutes but excluding Government aided institutes; and also proposed to include Government owned, managed, and operated hospitals within it. However, it has not made any sales projection for these proposed sub categories under the pretext that historical data for such consumers were not available at the time of submitting the Petition. Therefore, sales projection made by MSEDCL has been made on the basis of the existing categories only.
- 4.2.28 The Commission observed that MSEDCL has projected the sales of FY 2012-13 considering aggressive growth rates. The overall growth rate in sales in MSEDCL License area (excluding DF area sales), as projected by MSEDCL works out to 10.89%. Against this, the three year CAGR from FY 2007-08 to FY 2010-11 was 7.75%. MSEDCL has claimed that the higher sales will be resulted from lower load shedding due to increased power availability. The Commission after examining the power purchase availability in FY 2012-13, believes that sales target based on the CAGR of 10.89% may be difficult to achieve in FY 2012-13. Hence the Commission has projected the sales based on a CAGR of 8.75%, 100 basis points more than the three year growth rate. For projecting the category-wise sales for FY 2012-13, the Commission has considered the proportionate growth rates for each category as considered by the licensee and reduced it by the factor of ratio of overall growth rate considered by the Commission (8.75%) and overall growth rate considered by MSEDCL (10.89%). For example, a growth rate of 14% has been considered for HT Industrial by MSEDCL. The growth rate considered by the Commission for this category is 11.31%, after evaluating the growth rate as per the above approach.
- 4.2.29 For sales in the four Distribution Franchisee areas of Bhiwandi, Augrangabad, Jalgaon and Nagpur, the Commission has accepted the sales projections made by MSEDCL.
- 4.2.30 Some Consumer representatives and consumers, in the Technical Validation Session and during public hearings, have alleged that MSEDCL is projecting higher sales under the un-metered agriculture category to reflect a lower distribution loss. The Commission has also deliberated over the assessment of un-metered sales in the past and has already directed MSEDCL to submit a report on methodology to assess un-metered sales in a more accurate manner. However, it is important to study whether there has been any significant increase in un-metered sales in the past few years. The following chart represents the trend of metered and un-metered sales of MSEDCL over the last few years and for the ensuing year.

**Figure 1: Trend of Metered and Un-metered Sales of MSEDCL**



4.2.31 As can be seen in the above chart, there has been a marginal increase in un-metered sales in FY 2011-12. MSEDCL has submitted that 1,50,518 new un-metered consumers & 13,55,889 un-metered HP (both New Service Connection (NSC) & Load Extension) were added in FY 2011-12 (upto Dec-11). MSEDCL added that the rise in un-metered load has directly resulted in rise in un-metered sale as compared to last year. However, MSEDCL has projected lower un-metered sales in FY 2012-13, closer to the level of FY 2010-11. The Commission has dealt with the issue of increase in un-metered load in the section on Directives and has directed MSEDCL to release all new connections on metered basis only.

4.2.32 However, for approval of sales for FY 2011-12 and FY 2012-13, the Commission approves the un-metered agriculture sales in line with the approach which has been adopted for other categories as outlined in above paragraphs. The Commission, on receipt of the report by MSEDCL on methodology of assessment of un-metered agriculture sales, may re-assess the sales under this category.

4.2.33 The following table represents the energy sales (excluding sale to DFs) as projected by MSEDCL and as approved by the Commission.

**Table 52: Energy Sales for FY 2011-12 and FY 2012-13 as proposed by MSEDCL and as approved by the Commission (in MUs)**

Category	As proposed by MSEDCL		As approved by the Commission	
	FY 2011-12	FY 2012-13	FY 2011-12	FY 2012-13
<b>HT Category</b>				
<b>HT I - Industry</b>	<b>25,545</b>	<b>29,142</b>	<b>25,545</b>	<b>28,435</b>
Continuous Industry (on express feeder)	16,669	19,016	16,669	18,554
Non-continuous Industry (not on express feeder)	8,743	9,974	8,743	9,732
Seasonal Industry	133	152	133	148
<b>HT II - Commercial</b>	<b>1,888</b>	<b>2,201</b>	<b>1,888</b>	<b>2,140</b>



Category	As proposed by MSEDCL		As approved by the Commission	
	FY 2011-12	FY 2012-13	FY 2011-12	FY 2012-13
<b>HT – III - Railway Traction</b>	<b>1,344</b>	<b>1,489</b>	<b>1,344</b>	<b>1,460</b>
<b>HT IV – PWW</b>	<b>1,136</b>	<b>1,201</b>	<b>1,136</b>	<b>1,188</b>
Express Feeders	926	979	926	969
Non- Express Feeders	210	222	210	219
<b>HT V- Agriculture</b>	<b>648</b>	<b>648</b>	<b>648</b>	<b>648</b>
<b>HT- VI</b>	<b>272</b>	<b>341</b>	<b>272</b>	<b>328</b>
Group Housing Society	272	341	272	328
Commercial Complex	-	-	-	-
<b>HT Poultry/SP. AG</b>	<b>55</b>	<b>69</b>	<b>55</b>	<b>66</b>
<b>INTERSTATE</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>P.D. CONSUMERS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>HT TOTAL</b>	<b>30,889</b>	<b>35,091</b>	<b>30,889</b>	<b>34,266</b>
<b>LT Category</b>				
<b>LT I - Domestic</b>	<b>13,103</b>	<b>15,649</b>	<b>13,103</b>	<b>15,149</b>
BPL	217	217	217	217
LT I - Domestic	12,886	15,432	12,886	14,932
<b>LT II - Non Domestic</b>	<b>3,201</b>	<b>4,143</b>	<b>3,201</b>	<b>3,958</b>
0-20 kW	2,498	3,233	2,498	3,089
>20 - 50 kW	491	636	491	608
> 50 kW	211	274	211	261
<b>LT III - Public Water Works</b>	<b>522</b>	<b>543</b>	<b>522</b>	<b>539</b>
0- 20 kW	436	454	436	450
>20-40 kW	52	54	52	54
>40-50 kW	34	35	34	35
<b>LT IV - Agriculture</b>	<b>21,333</b>	<b>21,342</b>	<b>21,333</b>	<b>21,340</b>
Un-metered Tariff	11,317	10,524	11,317	10,680
Metered Tariff (including Poultry Farms)	10,016	10,817	10,016	10,660
<b>LT V - Industrial</b>	<b>3,886</b>	<b>4,134</b>	<b>3,886</b>	<b>4,085</b>
0-20 kW (upto and including 27 HP)	1,627	1,731	1,627	1,710
Above 20 kW (above 27 HP)	2,259	2,403	2,259	2,375
<b>LT V - Powerloom</b>	<b>1,117</b>	<b>1,297</b>	<b>1,117</b>	<b>1,262</b>
0-20 kW (upto and including 27 HP)	700	812	700	790
Above 20 kW (above 27 HP)	418	485	418	472
<b>LT VI - Street Light</b>	<b>831</b>	<b>831</b>	<b>831</b>	<b>831</b>

Category	As proposed by MSEDCL		As approved by the Commission	
	FY 2011-12	FY 2012-13	FY 2011-12	FY 2012-13
Grampanchayat, A, B & C Class Municipal Council	504	504	504	504
Municipal Corporation Areas	327	327	327	327
<b>LT VII - Temporary</b>	<b>58</b>	<b>70</b>	<b>58</b>	<b>68</b>
Temporary Connections –Other Purpose	56	69	56	66
Temporary Connections - Religious	1	2	1	2
<b>LTVIII - Advertisement &amp; Hoardings</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>4</b>
<b>LT IX – Crematoriums &amp; Burial Grounds :- New category created</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>SHOPPING MALLS</b>	-	-	-	-
<b>P.D. CONSUMERS</b>	-	-	-	-
<b>LT TOTAL</b>	<b>44,057</b>	<b>48,017</b>	<b>44,057</b>	<b>47,238</b>
<b>Total</b>	<b>74,947</b>	<b>83,108</b>	<b>74,947</b>	<b>81,504</b>

### 4.3 Energy Balance for FY 2011-12 and FY 2012-13

4.3.1 Energy balance for FY 2011-12 and FY 2012-13, as proposed by MSEDCL, is as given below.

**Table 53: Energy Balance for FY 2011-12 and FY 2012-13 as proposed by MSEDCL (MUs)**

Sr. No..	Particulars	FY 2011-12	FY 2012-13
		Estimated	Projections
	<u>Within Maharashtra</u>		
1	Purchase from MSPGCL	43,753	51,591
2	NPCIL Tarapur	4,010	4,401
3	Purchases from other sources and Medium-term	21,416	28,702
4	Zero Load Shedding	271	
5	Traders	4,454	
6	IBSM + FBSM	550	
7	Power of other Distribution licensee on MSEDCL Network	1,517	
8	UI	248	
A	Total Purchase within Maharashtra	76,218	84,694
	<u>Outside Maharashtra</u>		
1	Central Generating Station + NPCIL + UMPP + Case I + Sardar Sarovar + Pench	20,873	27,216

Sr. No..	Particulars	FY 2011-12	FY 2012-13
		Estimated	Projections
2	Traders	3,644	
3	UI		
4	Zero Load Shedding	205	
	Total Purchase outside Maharashtra	24,722	27,216
1	Inter-State Transmission Loss	4.21%	4.91%
2	Total Purchase at Maharashtra Periphery	23,682	25,881
3	Total Power Purchase Payable	100,940	111,910
	<u>Energy Available at Distribution periphery</u>		
1	Intra-state Loss	4.29%	4.29%
2	Energy at Distribution Periphery injected from 33 kv and above	95,614	105,831
3	Energy at Distribution Periphery injected and drawn at 33 kv	463	516
4	Energy at Distribution Periphery	96,078	106,347
5	distribution losses	16.27%	15.77%
6	distribution losses	15,632	16771
C	Energy Available for Sale	80,446	89,576

- 4.3.2 Regarding the item “Power of other Distribution Licensees on MSEDCL network”, MSEDCL clarified in one of the queries that it relates to the power which has been wheeled over the State transmission network and accounted for by SLDC as input to the State. However, this energy is not accounted in MSEDCL’s power procurement. MSEDCL has issued a Generation Credit Note (GCN) against the said injection of units in the State T&D Network. MSEDCL submitted the following with respect to the GCN:

*“MSEDCL submits that with regard to the item “Power of other Distribution Licensees of MSEDCL network” in energy balance statement, MSEDCL clarified that it was accounted for by the SLDC as input energy to the State of Maharashtra, however, this relates to the power which has been wheeled over the T&D network for Open Access consumers, who were not supplied power by MSEDCL. MSEDCL already issued a Generation Credit Note (GCN) against the said injection of units in the State through their T&D network.*

*MSEDCL further clarifies that though MSEDCL has included the impact of injection of Open Access Power in the energy balance, it has not accounted for the same in its power purchase.”*

- 4.3.3 The Commission observes that although MSEDCL has included the impact of injection of Open Access power in the energy balance, it has not accounted for the drawal of the same. The Commission directs MSEDCL to submit the actual energy balance to the Commission for FY 2011-12, properly taking into account the injection and drawal of power wheeled for Open Access within a period of 30 days from the date of issue of this Order. The Commission is not approving the energy

- balance in this Order and will approved the same during the Truing up of FY 2011-12 based on MSEDCL's submission of revised energy balance.
- 4.3.4 As discussed in Paragraph 4.1.2, the Commission has approved the distribution loss target for FY 2011-12 and FY 2012-13 as 16.27% and 15.77% respectively.
- 4.3.5 As discussed in the power purchase section, the Commission has re-estimated the power available from certain power sources. The Commission has also not accepted MSEDCL's claim that 3.75% of available power will not be despatched because of transmission congestion. The reason for the same has been elaborated in the section on power purchase expenses for FY 2011-12 and FY 2012-13.
- 4.3.6 The Commission had issued an Order dated 21 May, 2012 in Case No. 51 of 2012, in which it had determined the transmission charges for Intra-state transmission network. In the said order, the Commission has approved the intra-state transmission loss as 4.24%. The Commission has considered this loss for arriving at the energy balance for FY 2012-13.
- 4.3.7 The approved energy balance for FY 2012-13, based on Commission's analysis is as given below.

**Table 54: Energy balance for FY 2012-13 as approved by the Commission**

Sr. No..	Particulars	Units	Amount
	Within Maharashtra		
1	Purchase from MSPGCL	MUs	47,663
2	NPCIL Tarapur	MUs	4,573
3	Purchases from other sources and Medium-term	MUs	20,248
4	Zero Load Shedding	MUs	-
5	Traders	MUs	-
6	IBSM + FBSM	MUs	-
7	Power of other Distribution licensee on MSEDCL Network	MUs	-
8	UI	MUs	-
A	Total Purchase within Maharashtra	MUs	72,485
	Outside Maharashtra		-
1	Central Generating Station + NPCIL + UMPP + Case I + Sardar Sarovar + Pench	MUs	26,687
2	Traders	MUs	-
3	UI	MUs	-
4	Zero Load Shedding	MUs	-
	Total Purchase outside Maharashtra	MUs	26,687
1	Inter-State Transmission Loss	%	4.91%
2	Total Purchase at Maharashtra Periphery	MUs	25,378
3	Total Power Purchase Payable	MUs	99,172
B	Total Power Available at Transmission Periphery	MUs	97,862
	Energy Available at Distribution periphery		
1	Intra-state Loss	%	4.24%
2	Energy at Distribution Periphery injected from 33 kv and above	MUs	93,713
3	Energy at Distribution Periphery injected and	MUs	507

Sr. No..	Particulars	Units	Amount
	drawn at 33 kv		
4	Energy at Distribution Periphery	MUs	94,220
5	distribution losses	%	15.77%
6	distribution losses	MUs	14,858
C	Energy Available for Sale	MUs	79,361
1	Total Sale	MUs	87,971
D	Energy Deficit at consumer end	MUs	(8,610)
1	Deficit grossed up for Transmission Loss	MUs	(8,991)
2	Deficit grossed up by Distribution loss	MUs	(10,675)
E	Additional power purchase required	MUs	10,675

#### 4.4 Power purchase for FY 2011-12 and FY 2012-13

4.4.1 MSEDCL has estimated the power purchase expenses for FY 2011-12 and FY 2012-13 at Rs. 31,707 crore and Rs. 36,623 crore respectively. MSEDCL submitted that following are its primary sources of firm power.

- a) MSPGCL;
- b) Central Generating Stations;
- c) Ratnagiri Gas and Power Private Limited (RGPPL);
- d) JSW (Ratnagiri) Energy Ltd.;
- e) Adani Power Limited; and
- f) Mundra UMPP.

4.4.2 MSEDCL submitted that in addition to the above, it procures power from State power trading company, power exchanges and other sources such as Sardar Sarovar hydro project, Pench hydro project, non-conventional sources including co-generation, wind power and surplus power from captive power plants.

4.4.3 MSEDCL submitted that it procures power from different sources on Merit Order Despatch principle. MSEDCL added that considering the burgeoning demand supply gap, MSEDCL has considered the entire power available from all the sources during FY 2011-12 and FY 2012-13 to meet the demand to the extent possible and to ensure more availability of power.

#### **Power Purchase and Power Purchase Expenses for FY 2011-12**

4.4.4 For FY 2011-12, MSEDCL has estimated the power purchase and power purchase cost based on 10 month actual data (April 2011 to January 2012) and two months of estimated data based on the actual data of past ten months. Since MSEDCL's projections are based on 10 month actual data, the Commission has approved the same except in respect of MSPGCL and purchase from renewable sources.

4.4.5 The Commission issued the Order in Case No. 6 of 2012 on 21 June, 2012 in which it approved the ARR and Tariff of MSPGCL for FY 2011-12 and FY 2012-13. The Commission has considered the approved net generation for MSPGCL for FY 2011-12 as per the referred Order. The Commission has also considered the total ARR approved for MSPGCL for FY 2011-12 for arriving at the total cost for power purchased from MSPGCL. It may be noted that the Commission has revised the Tariffs for MSPGCL Stations for FY 2011-12 in the Order mentioned above. The following excerpts of the said Order are produced below in this regard.

***“Further, as FY 2011-12 is already over, therefore billing on the basis of the Tariff approved in this Order is not possible as MSPGCL has already billed for the energy supplied to MSEDCL in FY 2011-12 at existing Tariffs including FAC. As the details of actual revenue for FY 2011-12 including revenue recovered from FAC have not been submitted by MSPGCL, the Commission is not in a position to determine the gap/surplus for the given year which can be carried forward for recovery along with the Tariff of FY 2012-13. The Commission, however, is approving the Annual Fixed Charges (AFC) and variable charges for FY 2011-12 for the stations so that MSPGCL can compute its net revenue entitlement based on the actual net generation and charges approved by the Commission for FY 2011-12. MSPGCL should compute the revenue entitlement based on Annual Fixed Charges and energy charges approved by the Commission for FY 2011-12 and deduct the actual revenue billed including revenue from FAC during FY 2011-12 from the net revenue entitlement to arrive at shortfall or surplus in recovery for FY 2011-12. The Commission allows MSPGCL to recover such shortfall or pass on the surplus to MSEDCL, as the case may be, in eight equal instalments starting from August 2012 to March 2013. However, before recovering such shortfall or passing on surplus as the case may be, MSPGCL should submit the computations of the same to the Commission for prior approval.”(Emphasis Added)***

- 4.4.6 It may be inferred from the above Order that the actual billing of power sold by MSPGCL to MSEDCL for FY 2011-12 will be based on the approved ARR. However, the excess recovery or under recovery based on the difference of revenue collected based on prevailing Tariffs before the approval of Order in Case No. 6 of 2012 and the subsequently approved ARR of MSPGCL will be recovered in FY 2012-13 in eight monthly instalments.
- 4.4.7 However, for the purpose of approving cost of power purchase of MSEDCL from MSPGCL for FY 2011-12, the Commission at this stage, has assumed the total ARR of MSPGCL for FY 2011-12 as the power purchase expenses from MSPGCL.
- 4.4.8 It may be observed that although there may be a difference in time involved in recovery of the approved ARR of MSPGCL for FY 2011-12, the final recovery of power purchase expenses will be based on the revised approved ARR in Case No. 6 of 2012. Hence, the Commission has considered the same for provisionally approving the power purchase expenses for FY 2011-12 from MSPGCL.
- 4.4.9 With regard to purchase from renewable sources, MSEDCL submitted that for FY 2011-12, while calculating the power purchase cost from the non conventional energy sources, the amount considered is Rs. 1765.44 crore for 4547 MUs (considering the actual up to January 2012 and projection for balance 2 months). Thus the per unit cost for NCE for FY 2011-12 is calculated as Rs. 3.88 per unit which is less than the rate stipulated by the Commission for NCE Sources. Further payment for NCE sources is made as per the rate approved by the Commission whereby inadvertent error has been occurred while calculating the total cost from NCE Sources in Form 2 of the Tariff filing formats.

- 4.4.10 MSEDCL further submitted that the cost considered in Form 2 of the Tariff filing formats for FY 2011-12 is Rs. 1,765.44 crore which is considered inadvertently against the actual estimate of Rs. 1,882.60 crore. MSEDCL requested the Commission to condone the inadvertent error and consider the Power Purchase cost for FY 2011-12 from NCE sources as Rs. 1,882.60 crore for FY 2011-12. MSEDCL also submitted that the cost is also in line with the amount claimed in FAC whereby the rate works out to be Rs. 4.25 per unit. Due to the revision in the amount paid towards NCE sources, the revised per unit rate for power procured from renewable sources works out to Rs. 4.14 per kWh. The Commission observed that the per unit rate of procurement for FY 2010-11 was Rs. 4.11 per kWh and the projection for FY 2012-13 was Rs. 4.52 per kWh. Hence, the Commission is of the view that the claim by MSEDCL on this account seems reasonable and hence approves the same provisionally for FY 2011-12.
- 4.4.11 The approved power purchase quantum and cost, including ZLS for FY 2011-12 is as shown below:

**Table 55: Approved power purchase quantum and cost for FY 2011-12**

Sr. No.	Source of Power (Station wise)	Quantum of Energy available at generation bus-bar (MUs)	Total Cost (Rs. crore)	Rate per unit of power procured (Rs. Per kWh)
1	MSPGCL	43,984	12,483	2.84
2	KSTPS	4,550	605	1.33
3	VSTP I	3,438	945	2.75
4	VSTP II	2,776	633	2.28
5	VSTP III	2,466	669	2.71
6	KAWAS	957	460	4.81
7	GANDHAR	1,039	446	4.29
8	FSTPP-EP	-	7	
9	KhSTPS-I	-	5	
10	KhSTPS-II	720	275	3.82
11	TSTPS	-	3	
12	SIPAT TPS	2,447	646	2.64
	NTPC	18,394	4,694	2.55
13	KAPP	1,191	291	2.44
14	TAPP 1&2	1,263	123	0.98
15	TAPP 3&4	2,747	789	2.87
	NPCIL	5,202	1,203	2.31
16	SSP	1,151	236	2.05
17	PENCH	138	28	2.05
18	U.I. CHARGES	248	19	0.77
19	FBSM	503	265	5.27
20	DODSON I	60	13	2.22
21	DODSON II	62	16	2.56
22	RGPPL	11,222	4,234	3.77
23	TRADING Company	8,098	2,999	3.70

Sr. No.	Source of Power (Station wise)	Quantum of Energy available at generation bus-bar (MUs)	Total Cost (Rs. crore)	Rate per unit of power procured (Rs. Per kWh)
24	ZERO LOAD SH	476	218	4.58
25	Medium-term	2,526	1,040	4.12
26	IPP – JSW	1,880	601	3.19
27	POWERGRID	-	853	
28	Reactive Energy Ch	-	(10)	
29	PSEB ( SUPPLIED)	-	-	
30	PSEB ( RECEIVED)	-	-	
31	BANKING	-	-	
32	IBSM	46	47	10.19
33	WHEELING CHARGES	-	5	
	<b>TOTAL PP</b>	<b>93,989</b>	<b>28,944</b>	<b>3.08</b>
34	Non Conv. Energy Excl CPP	4,547	1,883	4.14
35	CPP	1,118	507	4.54
	<b>TOTAL PP INCLUDING NCE</b>	<b>99,654</b>	<b>31,334</b>	<b>3.14</b>

#### **Power Purchase and Power Purchase Expenses for FY 2012-13**

- 4.4.12 For FY 2012-13, MSEDCL submitted that it has extrapolated the energy availability based on estimates of FY 2011-12 and the relevant information about availability of different sources of generation.
- 4.4.13 The Commission has observed in the past Tariff Orders that the power purchase projected in the ARR does not materialise to the extent envisaged. As a result, MSEDCL has to rely on costlier short term power if the envisaged generation during the determination in the ARR is not available. This leaves MSEDCL in a situation where it is recovering Tariff from consumers at a lower rate as compared to the actual expenses, which are much higher as compared to that approved in the Tariff.
- 4.4.14 The Commission believes that a thorough analysis is required while projecting the power purchase and power purchase expenses in the determination of ARR to avoid the above situation. In this Tariff Order, the Commission has estimated the power purchase for FY 2012-13 on a realistic situation based on the availability of power from existing stations and commissioning status of upcoming stations by analysing each of the major sources of power for MSEDCL. MSEDCL is also directed to make a realistic projection of power purchase in future ARR Petitions based on actually envisaged availability of each of the major power sources.
- 4.4.15 The source wise projection of power purchase and power purchase cost for FY 2011-12 and FY 2012-13 as submitted by MSEDCL and as approved by the Commission is discussed below.

#### **MSPGCL**



- 4.4.16 MSEDCL submitted that it has considered power to be purchased from MSPGCL as per the actual availability and capacity. MSEDCL has assessed the power available from MSPGCL at 44658 MUs for existing stations, 4017 MUs for Bhusawal Unit 4 and 5, and 2742 MUs for Khaparkheda, totalling to 51591 MUs. MSEDCL submitted that it has considered the capacity charges as per actuals for existing stations and for upcoming projects, it has projected the same based on capacity charges of new projects. MSEDCL added that the variable charges have been projected considering actuals for FY 2011-12 with an escalation of 5% per annum. For Ghatghar Hydro Project, MSEDCL submitted that it has considered the O&M expenses, lease rent and other charges of Rs 194 crore per annum.
- 4.4.17 For estimating the power available from existing stations of MSPGCL for FY 2012-13, the Commission has considered the net generation from existing MSPGCL Stations as approved in Order in Case No. 6 of 2012. However, the Commission analysed the historical trend between approved generation of MSPGCL at the time of determination of ARR and actual supply at the time of True up by MSPGCL to MSEDCL for the past three years. The Commission observed that on an average, there was an 11% shortfall in generation when compared to the approved generation in ARR of MSPGCL. Based on the same, the Commission has reduced the quantum of power available from MSPGCL by 11% for FY 2012-13.
- 4.4.18 For the upcoming stations of MSPGCL, the Commission has analysed the actual status of these power projects - Khaparkheda Unit-5, Bhusawal Unit-4 and Bhusawal Unit-5. Khaparkheda Unit-5 has already achieved COD on 16 April, 2012, but has been producing much less than its rated capacity of 500 MW. For the month of July 2012, the PLF of Khaparkheda Unit-5 was only 31%. Accordingly, the Commission has considered the generation from Khaparkheda for FY 2012-13 at 50% PLF.
- 4.4.19 Regarding Bhusawal Unit-4 and Unit-5 stations, although these have achieved commissioning in March 2012, they have not achieved commercial operation till the date of issuance of this Order and are facing technical issues. Considering the uncertainty associated with the commercial operation date of these projects, the Commission has considered the availability from these units only from January 2013 considering a PLF of 80%.
- 4.4.20 For projecting the expenses for power purchase from MSPGCL Stations for FY 2012-13, the Commission has considered the approved Tariff for FY 2011-12 for three months and approved Tariff for FY 2012-13 for nine months, since the Order in Case No. 6 of 2012 is applicable from July 1, 2012.

#### **NTPC**

- 4.4.21 In case of NTPC, MSEDCL submitted that units available have been considered as per the availability of FY 2011-12. MSEDCL further submitted that in addition to the above, additional power from Sipat (170MW\*2) has been estimated at 2717 MUs, additional power from Korba Unit 7 (108 MW) has been estimated at 802 MUs and additional power from Barh (33MW\*2) is estimated at 125 MUs. MSEDCL further clarified that no projection has been made for eastern region power except Kahalgaon II as per notice dated 30 September, 2010.
- 4.4.22 MSEDCL submitted that it has considered fixed charges for central generation stations on the basis of the Hon'ble CERC's Order issued in July 2011 for FY

- 2012-13. MSEDCL submitted that considering the actual availability, fixed charges have been calculated on pro rata basis and no incentives have been considered. MSEDCL further clarified that since the Tariff is based on pre-tax return, it has not considered income tax separately. MSEDCL submitted that since the variable charges are as per actual rates, no fuel price adjustment has been considered while projecting expenses for power purchase from NTPC. MSEDCL submitted that for arriving at the variable charges for FY 2012-13, the variable charges for FY 2011-12 have been escalated by 5%.
- 4.4.23 For FY 2012-13, the Commission has considered the power available from existing Central Generating Stations as per MSEDCL's submission. However, for the upcoming stations, the Commission has analysed the status of these projects for considering the availability from these units.
- 4.4.24 Mauda power project's one unit of 500 MW has achieved commissioning in April 2012 but is yet to achieve commercial operation as per the information available at the time of issuance of this Order. As per the CEA report on monthly generation, the station has only produced 2 MUs till June 2012. As per the "Monthly Report on Broad Status of Thermal Power Projects in the country" for June 2012 published by CEA, the expected COD for Unit-1 and Unit-2 of Mauda is December 2012 and September 2013 respectively. Considering the uncertainty of commercial operation associated with units of Mauda power project, the Commission has not considered any availability from these units for FY 2012-13.
- 4.4.25 Barh power project of NTPC has not been commissioned till the date of issuance of this Order. As per the primary research carried out by the market monitoring cell of the Commission, Barh power project is not expected to achieve commercial operation in FY 2012-13. Hence the Commission has not considered any availability from Barh power project for FY 2012-13.
- 4.4.26 Unit-11 of Vindhyanal power project Stage IV was expected to be commissioned in June 2012 as per the "Monthly Report on Broad Status of Thermal Power Projects in the country" for June 2012 published by CEA. As per the research carried out by the market monitoring cell of the Commission, the unit is expected to achieve commercial operation by the end of September 2012. Hence the Commission has considered the availability of power from Unit-11 of Vindhyanal Stage-IV for the last five months of FY 2012-13 at a PLF of 85%.
- 4.4.27 All three units of Sipat Phase-I have achieved commercial operation as on the date of issuance of this Order. Considering that the commercial operation dates considered by MSEDCL have turned out to be accurate for Sipat Phase-I project, the Commission has considered the availability from Sipat Phase-I as proposed by MSEDCL.
- 4.4.28 For projecting the variable charges for existing stations, the Commission had sought the power bills issued by NTPC to MSEDCL for April 2012. The Commission has considered the same Tariff as charged by NTPC for April 2012 for projecting the total cost on variable charges payable to NTPC for FY 2012-13. For projecting the total cost on account of fixed charges payable to NTPC for FY 2012-13, the Tariff as approved as per the relevant CERC Tariff Orders has been considered.
- 4.4.29 MSEDCL clarified in reply to one of the queries that it has considered a higher availability for Central Generation stations. It has considered the availability of

90% for KSTPS, KSTPS-III, VSTPS-I, VSTPS-II, VSTPS-III, KhSTPS-II and Sipat TPS and 92% for Kawas and Gandhar generating stations. MSEDCL submitted that it has considered a proportionate increase in capacity charges payable by it based on the higher availability. The Commission observed that the above approach is in line with CERC (Terms and Conditions of Tariff) Regulations, 2009. The Commission has allowed the higher capacity charges in proportion to an availability of 90% for all existing central generating stations.

- 4.4.30 For VSTPS-IV, MSEDCL submitted that it has considered the fixed and variable charges equal to that of VSTPS-III, as the Tariff for the same has not yet been approved by the Hon'ble CERC. The Commission has considered the Tariff for VSTPS-IV equal to the approved per unit Tariff for VSTPS-III in this order, which is Rs. 2.56 per kWh.

#### **Nuclear Power Corporation**

- 4.4.31 MSEDCL submitted that it has estimated 5133 MUs to be available from NPCIL for FY 2012-13 as per the availability in FY 2011-12 and an average rate Rs. 2.46 per unit was used to arrive at the power purchase cost. MSEDCL submitted in response to one of the queries raised by the Commission that it has projected the power purchase cost by applying an escalation of 5% over the actual power purchase cost in FY 2011-12. Further, in the meeting held between the Commission's staff and MSEDCL on 25 June, 2012, MSEDCL had clarified that it had considered the Tariffs for Central Generation Stations as per the September 2011 bills while arriving at the projected Tariffs for FY 2012-13.

- 4.4.32 The Commission approves the power purchase units and cost for NPCIL for FY 2012-13 as submitted by MSEDCL.

#### **Sardar Sarovar Project (SSP) and Pench**

- 4.4.33 MSEDCL submitted that it has projected power purchase from SSP and Pench hydro station based on past trend. MSEDCL added that it has considered the Tariff as Rs. 2.05 per unit which is currently being paid. MSEDCL clarified that the above rate shall prevail until such time GOM claims for additional Tariff for Sardar Sarovar Project & Pench.
- 4.4.34 The Commission approves the power purchase and cost of power purchase from Sardar Sarovar Project and Pench as proposed by MSEDCL for FY 2012-13.

#### **Dodson I and II**

- 4.4.35 MSEDCL has projected availability of 40 and 86 MUs from Dodson I and II respectively in FY 2012-13. MSEDCL submitted that it has considered the amount of Annual Fixed Cost of Rs. 15 crore as approved by the Commission in Case No. 27 of 2008 for Dodson II. MSEDCL added that for Dodson I, it has considered average rate Rs. 2.10 per unit for the variable charges.
- 4.4.36 The Commission approves MSEDCL's projections for power purchase quantum and expenses from Dodson I and II for FY 2012-13.

#### **Purchase from Renewable Sources and CPP**

- 4.4.37 MSEDCL submitted that to meet its RPO obligation, it has entered into power purchase agreement with all the generators of renewable sources which approached it for power sale. MSEDCL submitted that it has considered the estimates of

- generation made available by RE sources for FY 2012-13 as per the respective sources of generation. MSEDCL has projected power purchase quantum of 7,454 MUs at an estimated the cost of Rs. 4.52 per unit from renewable energy sources.
- 4.4.38 For CPP, MSEDCL submitted that it has projected power purchase of 866 MUs and cost of procurement of power has been considered at Rs. 4.73 per unit. The Commission observed that there was a steep increase in quantum of power procured from Captive power plants in FY 2011-12 and again a significant drop in FY 2012-13. MSEDCL, in response to the query raised by the Commission for the reasons of the same replied that in FY 2010-11, it was procuring power from certain CPPs under ZLS route. Since the ZLS scheme was discontinued in FY 2011-12, these CPP stations, which were still supplying power to MSEDCL as per the yearly contracts, had been included in the "CPP" category. The Commission acknowledges that the re-categorisation from "ZLS" category to "CPP" category has resulted in the apparent increase in power availability from the CPP sources in FY 2011-12.
- 4.4.39 The Commission asked MSEDCL to provide clarification on how the rate of power purchase from CPPs is finalised by MSEDCL as no fixed rate is determined by the Commission for the same. In response to the same, MSEDCL replied the following:
- “Average power purchase cost for FY 2008-09 was Rs. 6.65 per unit. Average power purchase cost for FY 2009-10 (upto Oct’09) was Rs. 6.80 per unit. It was also observed that the Average power purchase cost during peak demand season (Jan-June) was around Rs. 7.00/-. At that point of time (around Oct’ 09) the maximum demand supply gap was 3858 MW. Further, the CPP power was firm power and was available at RTC at the door step of MSEDCL. The rate was required to be decided such that it was beneficial to the CPP holders and it would not burden common consumers of MSEDCL. In view of all the above points, the rate was decided (around Dec’09 - Jan 2010) at Rs. 5/- per unit.”*
- 4.4.40 MSEDCL submitted the list of CPP projects with which it has contracted power for FY 2010-11, FY 2011-12 and FY 2012-13 in response to one of the queries raised by the Commission. MSEDCL also submitted the Tariffs at which power was procured from CPPs for FY 2010-11, FY 2011-12 and FY 2012-13. The same is provided below.

**Table 56: Tariff at which power was procured from CPPs as submitted by MSEDCL**

Year	Tariffs at which power was procured from CPPs
FY 2010-11	Rs. 5 per unit
FY 2011-12	Rs. 4.60 per unit from 06.00 to 22.00 hours and Rs. 3.55 per unit from 22.00 hours to 06.00 hours

Year	Tariffs at which power was procured from CPPs	
FY 2012-13	<b>Percentage of annual generation</b>	<b>Purchase Rate per unit</b>
	Upto 25%	a) 06.00 hours to 22.00 hours : Rs. 4.50 b) 22.00 hours to 06.00 hours : Rs. 3.30
	Beyond 25% and upto 49%	a) 06.00 hours to 22.00 hours : Rs. 4.25 b) 22.00 hours to 06.00 hours : Rs. 2.75

- 4.4.41 The Commission observes that the power purchase rate from CPPs for FY 2012-13 is ranging between Rs. 2.75/kWh to Rs. 4.50/kWh. Therefore, for FY 2012-13, the Commission approves the power purchase from CPP at Rs. 4.25/kWh. For power purchase from renewable sources, the Commission has considered the projections as submitted by MSEDCL for FY 2012-13 after considering the explanation provided on power procurement cost as elaborated above.

#### **Ratnagiri Gas and Power Private Limited (RGPPL)**

- 4.4.42 MSEDCL submitted that as per GOI guidelines, 5% share from RGPPL is allocated to Goa, Daman and Dadra and Nagar Haveli. MSEDCL further submitted that due to the above allocation, 95% of total capacity of RGPPL has been considered for arriving at the quantum of power purchase from this source for FY 2012-13. MSEDCL added that the fixed charges and energy charges have been considered as per the Hon'ble CERC's Tariff Order dated 18 August, 2010 with revised MAT rate.
- 4.4.43 The Commission observed that RGPPL has been generating power with a PLF of only 46% in the first three months of FY 2012-13 as per the monthly generation report published by CEA for June 2012. The lower generation by RGPPL is a result of lower gas availability from the D6 field of the Krishna-Godavari basin. Therefore, the Commission has considered the availability of power from RGPPL based on the capacity of 600 MW (after auxiliary consumption) to be available for FY 2012-13.
- 4.4.44 The Commission has verified the Order for approval of Tariff for RGPPL and found the fixed charges of Rs. 1952 crore considered by MSEDCL to be correct. However, MSEDCL has not considered the ratio of fixed charges in line with the ratio of power allocation. The Commission has considered Rs. 1,854 crore as the fixed charges after applying the ratio of 95% on the total approved fixed charges of RGPPL. The Commission has computed the variable cost of power purchase from RGPPL based on the variable charges of Rs. 2.28 per kWh as proposed by MSEDCL and considering the energy available as computed in the above paragraph.

#### **JSW Ratnagiri (IPP)**

- 4.4.45 MSEDCL has projected availability of 1,862 MUs from JSW Energy (Ratnagiri) Ltd considering 80% PLF and a total cost of Rs. 671 crore against the same. MSEDCL added that the rate of power purchase based on which the above cost is arrived has been considered as per PPA between MSEDCL and JSW.
- 4.4.46 The Commission sought the copy of the signed PPA between MSEDCL and JSW Energy (Ratnagiri) Ltd. The Commission observed that the Tariff quoted by JSW

Energy also included escalable components in Fuel Energy Charge and Capacity Charge. The break-up of the total quoted Tariff is as follows:

**Table 57: Break-up of Tariff for procurement of power from JSW Energy Ltd. under Case-I**

<b>Tariff Component</b>	<b>Base Year Value</b>
Quoted Non-Escalable Capacity Charges (QNECC)	0.9064 Rs/kWh
Quoted Escalable Capacity Charges (QECC)	0.1498 Rs/kWh
Quoted Escalable Fuel Energy Charges (QEFEC)	0.01708 USD/kWh
Quoted Non-Escalable Transportation Energy Charges (QNETEC)	0.00519 USD/kWh
Quoted Non-escalable Fuel Handling Energy Charges (QNFHEC)	0.1298 Rs/kWh

4.4.47 The Commission computed the escalable fuel energy and escalable capacity charge in line with the explanation provided in Schedule 8 of the PPA. The following chart represents the results of computation made by the Commission:

**Table 58: Commission's analysis of escalable component of Tariff for JSW Energy Ltd. under long-term Case-I route**

Date	Remarks	QEFEC Index Value	QEFEC (USD/kWh)	QEFEC (Rs/kWh) @ Rs 57.46 per USD (TT Selling Rate of HDFC bank as on 25th July 2012)	QECC Index Value	QECC (Rs/kWh)
14-Feb-08	Index = 100 for escalable energy charges	100.00	0.0171	0.98		
29-Feb-08		103.00	0.0176	1.01		
31-Mar-08		106.00	0.0181	1.04		
30-Apr-08		115.34	0.0197	1.13		
31-May-08		124.68	0.0213	1.22		
30-Jun-08		134.03	0.0229	1.32		
31-Jul-08		143.37	0.0245	1.41		
31-Aug-08		152.71	0.0261	1.50		
30-Sep-08		162.05	0.0277	1.59		
31-Oct-08		171.64	0.0293	1.68		
30-Nov-08		181.24	0.0310	1.78		
31-Dec-08		190.83	0.0326	1.87		
31-Jan-09		200.43	0.0342	1.97		
28-Feb-09		210.02	0.0359	2.06		
31-Mar-09		219.62	0.0375	2.16		
30-Apr-09		214.28	0.0366	2.10		
31-May-09		208.94	0.0357	2.05		
30-Jun-09		203.60	0.0348	2.00		
31-Jul-09		198.26	0.0339	1.95		
31-Aug-09		192.77	0.0329	1.89		
30-Sep-09		187.27	0.0320	1.84		
31-Oct-09		181.78	0.0310	1.78		
30-Nov-09		176.29	0.0301	1.73		
31-Dec-09		170.79	0.0292	1.68		
31-Jan-10		165.30	0.0282	1.62		
28-Feb-10		168.47	0.0288	1.65		
31-Mar-10		171.65	0.0293	1.68		
30-Apr-10		174.82	0.0299	1.72		
31-May-10		178.00	0.0304	1.75		
30-Jun-10		181.17	0.0309	1.78		
31-Jul-10		184.35	0.0315	1.81		
31-Aug-10		187.85	0.0321	1.84		

Date	Remarks	QEFEC Index Value	QEFEC (USD/kWh)	QEFEC (Rs/kWh) @ Rs 57.46 per USD (TT Selling Rate of HDFC bank as on 25th July 2012)	QECC Index Value	QECC (Rs/kWh)
30-Sep-10	Scheduled COD of the first unit; Escalation Index to be 100 for Escalable Capacity Charges	191.36	0.0327	1.88	100.00	0.15
31-Oct-10		194.87	0.0333	1.91	100.76	0.15
30-Nov-10		198.37	0.0339	1.95	101.53	0.15
31-Dec-10		201.88	0.0345	1.98	102.29	0.15
31-Jan-11		205.38	0.0351	2.02	103.05	0.15
28-Feb-11		208.25	0.0356	2.04	103.82	0.16
31-Mar-11		211.12	0.0361	2.07	104.58	0.16
30-Apr-11		213.99	0.0365	2.10	105.34	0.16
31-May-11		216.86	0.0370	2.13	106.10	0.16
30-Jun-11		219.73	0.0375	2.16	106.85	0.16
31-Jul-11		222.60	0.0380	2.18	107.61	0.16
31-Aug-11		224.41	0.0383	2.20	108.37	0.16
30-Sep-11		226.22	0.0386	2.22	109.12	0.16
31-Oct-11		228.02	0.0389	2.24	109.87	0.16
30-Nov-11		229.83	0.0393	2.26	110.62	0.17
31-Dec-11		231.64	0.0396	2.27	111.37	0.17
31-Jan-12		233.45	0.0399	2.29	112.12	0.17
29-Feb-12		232.32	0.0397	2.28	112.87	0.17
31-Mar-12		231.20	0.0395	2.27	113.62	0.17
30-Apr-12		230.07	0.0393	2.26	114.35	0.17
31-May-12		228.95	0.0391	2.25	115.10	0.17
30-Jun-12		227.82	0.0389	2.24	115.85	0.17
31-Jul-12		226.70	0.0387	2.22	116.60	0.17
31-Aug-12		225.57	0.0385	2.21	117.35	0.18
30-Sep-12		224.45	0.0383	2.20	118.10	0.18

4.4.48 The Commission arrived at the following Tariff for FY 2012-13 based on the above analysis.

**Table 59: Commission's analysis of Tariff payable to JSW Energy Ltd. under long-term Case-I route**

Tariff Component	Value for FY 2012-13
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Tariff Component	Value for FY 2012-13
Quoted Non-Escalable Capacity Charges (QNECC)	0.8293 Rs/kWh
Quoted Escalable Capacity Charges (QECC)	0.1741 Rs/kWh (Projected based on average of rates estimated for April to September for FY 2012-13)
Total capacity charges	1.00 Rs/kWh
Quoted Escalable Fuel Energy Charges (QEFEC)	2.2304 Rs/kWh
Quoted Non-Escalable Transportation Energy Charges (QNETEC)	0.2982 Rs/kWh
Quoted Non-escalable Fuel Handling Energy Charges (QNFHEC)	0.1298 Rs/kWh
Total variable charges	2.66 Rs/kWh

4.4.49 As against this, MSEDCL has considered a total power purchase cost per unit of Rs. 3.60 per kWh for FY 2012-13. The total power purchase rate per unit considered by MSEDCL being almost same as that arrived by the Commission, the same is approved as projected by MSEDCL.

4.4.50 The Commission approves the quantum and cost of power purchase from JSW Ratnagiri as projected by MSEDCL.

#### Adani Power (IPP)

4.4.51 MSEDCL has contracted 1320 MW of power with Adani Power through Competitive Bidding for procurement of power under Case-I route. MSEDCL submitted that it has entered into agreement with Adani Power Ltd. for purchase of 1320 MW power from Tiroda project in Maharashtra. MSEDCL submitted that Unit 2 and 3 of 660 MW each are expected to get commissioned in August 2012. Accordingly, MSEDCL has considered a purchase of 5,566 MUs from Adani Power for FY 2012-13 considering PLF 80%. MSEDCL further submitted that it had computed the total cost by considering fixed charges of Rs. 1.42 per unit and variable charges of Rs. 1.69 per unit.

4.4.52 In reply to one of the queries raised by Consumer Representative Prayas, MSEDCL submitted that it has considered the Commissioning of Tiroda Power Project for July 2012. The Commission asked MSEDCL to justify its assumption of commissioning dates of the project. MSEDCL replied that it has considered the availability from Adani power project based on the following assumptions. MSEDCL submitted that it has considered the commissioning dates based on information provided by the generator, which is more realistic.

**Table 60: Availability of power from Adani Power under Long-term Case-I route as projected by MSEDCL**

	COD	Capacity	MUs
Unit 1	Aug-12	660 MW	2,661
Unit 2	Sep-12	660 MW	2,281
Unit 3	Aug-12	125 MW	624
<b>Total</b>			<b>5,566</b>

- 4.4.53 As on the date of issuance of this Order, no units from the above three units has achieved commissioning. As per the research carried out by market monitoring cell of the Commission, the commercial operation of first unit is expected by December 2012 and the commercial operation of other two units is envisaged after FY 2012-13. Accordingly, the Commission has considered the energy availability from Unit-1 of Tiroda power project for three months at a PLF of 85% and has not considered any power availability from the other two units.
- 4.4.54 The Commission sought the copy of signed PPA between MSEDCL and Adani Power from MSEDCL. The Commission scrutinised the PPA and found the power purchase rate was lesser than that considered by MSEDCL while arriving at the power purchase cost. The power purchase cost as per the PPA is Rs. 2.553 Rs per kWh for the first year and comprises of only non-escalable components. As compared to this, MSEDCL has considered a rate of Rs. 3.17 per kWh and has not provided the reasons for considering a higher power purchase rate than mentioned in the PPA. Accordingly, the Commission has considered a Tariff of Rs. 2.553 per kWh while approving the power purchase cost from Adani Power.

### **Mundra UMPP**

- 4.4.55 MSEDCL submitted that it has entered into agreement with Coastal Gujarat Power Limited for Mundra Ultra Mega Power Project. MSEDCL added that it has been allocated 800 MW (20% share) power from this plant. MSEDCL further clarified that the first unit of 800 MW is being commissioned in April 2012 and thereafter each unit of 800 MW after every 3 months. Accordingly, it has projected availability of total 2,203 MUs from this project at a total cost of Rs. 506 crore, considering 80% PLF at a variable cost of Rs. 1.36 per unit and a fixed cost of Rs. 0.905 per unit as per the levelized Tariff.
- 4.4.56 The Commission asked MSEDCL to clarify its approach on arriving at the commissioning schedule and the installed capacity considered by it while arriving at the power availability from Mundra UMPP. MSEDCL replied that it has considered a share of 160 MW per Unit from Mundra UMPP for total installed capacity of 800 MW per Unit. It was further submitted that in Form 2 of the regulatory formats, MSEDCL had considered the capacity as 600 MW and MSEDCL's share as 180 MW which was an inadvertent error. MSEDCL submitted the following break-up of energy availability from Mundra UMPP project.

**Table 61: Availability of power from Mundra UMPP as projected by MSEDCL**

<b>Unit</b>	<b>COD</b>	<b>Capacity</b>	<b>MUs</b>
Unit 1	Mar-12	160 MW	1017.45
Unit 2	Jul-12	160 MW	678.30
Unit 3	Oct-12	160 MW	423.94
Unit 4	Jan-13	160 MW	169.57
Unit 5	Mar-13	160 MW	0.00
<b>TOTAL</b>			<b>2289.25</b>

- 4.4.57 The Commission observed that the first unit of Mundra UMPP has already initiated commercial operation from the beginning of FY 2012-13. The second unit of the project has also initiated commercial operation since the end of July 2012. However, there is uncertainty over the commercial operation dates of the remaining units of Mundra UMPP. Accordingly, the Commission has considered the availability from first unit for the entire twelve months and that from the second unit from August 2012 to March 2013. The Commission has considered the energy availability based on the PLF of 80% as per the normative availability defined in the PPA between MSEDCL and Coastal Gujarat Power Limited, which is the SPV developing the project. Hence, the Commission approves a quantum of 1,738 MUs from Mundra UMPP for FY 2012-13.
- 4.4.58 The Commission scrutinised the PPA and computed the Tariff based on the escalation rates notified by the Hon'ble CERC and found the Tariff considered by MSEDCL to be in line with that computed by the Commission. Hence, the Commission approves the Tariff of Rs. 2.26 per kWh as estimated by MSEDCL for FY 2012-13.

#### Medium-term Power Procurement

- 4.4.59 MSEDCL submitted that, with the approval of the Commission, it had floated tender for medium-term power purchase of 775 MW between October 2011 and September 2012 under Competitive Bidding Guidelines. MSEDCL further submitted that it has placed orders for 775 MW power for supply of power from August 2011 to October 2012. Accordingly, it has considered availability of 3,023 MUs at the rate of Rs. 4.16 per for FY 2012-13.
- 4.4.60 The Commission sought the details of medium-term power contracted by MSEDCL. MSEDCL submitted the following details of energy availability from power tied up through medium-term power procurement under Case-I route.

**Table 62: Details of medium-term power procurement by MSEDCL**

Source	Capacity (MW)	Period	Energy Availability (MUs)								Total
			Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	
JSW	300	Aug 11 to Aug 12	184	184	184	184	175				911
Adani	475	Nov 11 to Nov 12	290	290	290	290	290	290	290	200	2230
		<b>Total</b>	<b>474</b>	<b>474</b>	<b>474</b>	<b>474</b>	<b>465</b>	<b>290</b>	<b>290</b>	<b>200</b>	<b>3141</b>

- 4.4.61 The Commission has already adopted the Tariff for procurement of power by MSEDCL under medium-term power procurement through Case-I route in Order dated May 19, 2011 in Case No. 23 of 2011, which is Rs. 4.10 per kWh. MSEDCL has also considered short term Open Access charges of Rs. 19 crore in addition to the power purchase cost arrived at based on the rate of Rs. 4.10 per kWh. The Commission however, observed that for FY 2011-12, MSEDCL has not claimed any amount on account of short term Open Access charges. Hence, the Commission has not considered any amount towards short term Open Access in

this Order. The Commission will consider any actual charges paid at the time of final Truing up of FY 2012-13.

- 4.4.62 The Commission approves the quantum and cost of power purchase, excluding the charges towards short term Open Access from medium-term power purchase arrangement as projected by MSEDCL.

#### **Power Purchase from Traders and IBSM**

- 4.4.63 MSEDCL, in its Petition, submitted that in case of any short fall in energy available from the above mentioned sources, it would source power from Traders or any other sources available at the market price prevailing at the point of time. However, for the approval of the ARR under this Petition, MSEDCL has not estimated any power purchase from traders in FY 2012-13.

- 4.4.64 However, on carrying out the energy balance, the Commission found that MSEDCL is expected to face a shortfall in FY 2012-13. The Commission observed that the rate at which MSEDCL has procured power from traders in April-May 2012 is in the range of Rs. 4.10-4.30 Rs/kWh. The Commission also evaluated the weighted average Tariff at which short term power was procured at the national level based on the market monitoring report published by the Hon'ble CERC for April and May 2012. The weighted average Tariff transacted through traders and exchanges works out to Rs. 4.00. The Commission found that the weighted average cost of Open Access per unit of the total short term power purchase in FY 2010-11 was Rs 0.18 per kWh. Based on the above facts, the Commission approves a landed Tariff of Rs. 4.50 per kWh for procurement from short term sources for FY 2012-13.

- 4.4.65 Further, the Ministry of Power has passed a resolution dated 15 May, 2012. In the said resolution, MoP has issued guidelines for short term power procurement by distribution licensee through Tariff based bidding process. As per the resolution, it is mandatory for the distribution licensee to procure short term power through Tariff based competitive. The Commission directs MSEDCL to procure entire short term power through competitive bidding route only.

- 4.4.66 In the said resolution, it has also been mentioned that if the quantum and Tariff of short term power being procured by the distribution licensee is within the blanket approval granted by the appropriate Commission during the determination of ARR of the respective year, the same shall be considered to have been adopted by the appropriate Commission for the distribution licensee. If that is not the case, the distribution licensee shall have to submit a Petition to the appropriate Commission for adoption of Tariff.

- 4.4.67 MSEDCL submitted that it is difficult to predict the expected unscheduled interchange quantum and the market price at which it is billed. Hence, it has made no projection for FY 2012-13 against FBSM/ IBSM and MSEDCL requested the Commission to allow the same at actual while Truing up.

- 4.4.68 MSEDCL submitted that for FY 2012-13, no provision has been made for banking of energy from any source but the same will be decided as and when required. The Commission will consider the power purchase from banking, IBSM and UI at the time of True up as submitted by MSEDCL.

#### **Renewable purchase obligation for FY 2011-12 and FY 2012-13**

- 4.4.69 As per the MERC (Renewable Purchase Obligation, its Compliance and implementation of REC framework) Regulations, 2010, each distribution licensee is required to meet 7% and 8% of its requirement through renewable sources for FY 2011-12 and FY 2012-13 respectively, including 0.25% through solar sources. The Commission asked MSEDCL to provide details on how it plans to meet its RPO obligation for FY 2011-12 and FY 2012-13. MSEDCL provided the following breakup of procurement for the various sources for FY 2011-12 and FY 2012-13.

**Table 63: Procurement from renewable energy sources for FY 2011-12 and FY 2012-13 as submitted by MSEDCL**

Source	FY 2011-12	FY 2012-13
Wind	2704.6	3368.3
Biomass	263.6	374.6
Bagasse	1421.2	3515.9
Small Hydro	146.32	193.5
Solar	10.8	271.5
MSW		19.5
<b>Total</b>	<b>4546.81</b>	<b>7743.62</b>

- 4.4.70 The renewable energy purchase shown above does not include purchase from MSPGCL's units and other sources under captive power plants. MSEDCL has to procure at least 6.75% and 7.75% of its total power purchase requirement for FY 2011-12 and FY 2012-13 from non-solar RPO sources in order to fulfil the requirement under the RPO obligations, which works out to approximately 6,726 MUs (6.75% of 99,654 MUs) and 8,513 MUs (7.75% of 1,09,847 MUs) for FY 2012-13.
- 4.4.71 With regard to meeting its solar RPO for FY 2011-12 and FY 2012-13, MSEDCL has submitted that it may not be able to meet its solar RPO due to the following reasons:

*“MSEDCL has executed the EPA's for the total capacity 147 MW as on date to meet the solar target for FY 2011-12 under various schemes of GoI. Out of them as on Dec-11, 15 MW solar power projects are commissioned....*

*..... 11.4.4 The approx. Mus required to meet the solar RPO target for FY 2011-12 and FY 2012-13 are 234 Mus and 257 Mus. respectively...*

*... 11.4.5 As on Dec-11, Solar Mus supplied by the projects are 4.316 Mus. Thus there is shortfall of approx. 220 to 225 Mus of solar power during FY 2011-12 and in the same range likely to be during FY 2012-13, if MSPGCL projects not commissioned even during FY 2012-13.*

*11.4.6 Reasons for not fulfilling the solar RPO target*

a) MSEDCL is not able to fulfil the solar RPO target as the 125 MW solar power plant at Sakri, Dist. Dhule which was expected to be commissioned on or before 31st March 2012, could not be commissioned due to land acquisition problems of MSPGCL.

b) Being a force majeure case, it will be unfair to procure REC and load the consumers for no fault of theirs.

c) Clause in our EPA with MSPGCL that, "the seller shall complete the project on or before 31.03.2012. In the event if the COD is delayed beyond 31.03.2012, due to non compliance of RPO, if MERC recovers any regulatory charges the same should be passed on to MSPGCL", which is not invoked due to the force majeure condition."

- 4.4.72 MSEDCL has also provided the details of correspondence with the Government of Maharashtra in regard to the issue of not being able to fulfil the solar RPO for FY 2011-12 and FY 2012-13. The Commission observes that MSEDCL is making efforts to procure power from solar sources. However, the Commission directs MSEDCL to make up for the shortfall of procurement in solar RPO cumulatively by FY 2015-16.

#### **Transmission Charges**

- 4.4.73 MSEDCL submitted that it has projected the PGCIL transmission charges based on POC charges Regulation, Transmission Services Agreement and enhanced availability. The Commission approves the Inter-State Transmission Charges as projected by MSEDCL.

#### **Transmission Constraint in FY 2012-13**

- 4.4.74 MSEDCL submitted that as per its estimates, there will be a transmission constraint in the intra-state transmission network in FY 2012-13. The detailed submission of MSEDCL in this regard is reproduced below.

*"MSEDCL has endeavoured to increase availability of power substantially in FY 2011.12 and 2012-13. However it is pertinent to note that the transmission capacity is not enhanced to that extent. As such, it may happen that the available power cannot be evacuated in the system due to transmission constraint & MSEDCL may compel to restrict the power purchase by backing down the generation, wherever the transmission capacity is inadequate. **MSEDCL presumes that about 3.75% out of total power procurement projected quantum may be affected owing to such transmission constraint.** MSEDCL submits that it has planned to purchase power from various generating stations; however considering the past experience, there is no assurance that all generating stations will generate the projected energy generation. Without, considering any specific generating station, MSEDCL has considered an average Transmission Constraint applicable to all generating stations from which MSEDCL is procuring power. Thus without considering the Merit Order Dispatch,*

*MSEDCL has applied average transmission constraint to all the sources of power."***(Emphasis added)**

- 4.4.75 The Commission asked MSEDCL to justify its estimate of impact of 3.75% on total power procurement. MSEDCL submitted that it has considered a constraint of 3.75% considering not only the transmission constraint but also including the generation constraint as well as availability of power based on the past experience. MSEDCL further submitted that the transmission system availability of MSETCL, although improving, has been lesser than 95% except in FY 2010-11 (in case of HVDC).

**Table 64: System availability of MSETCL submitted by MSEDCL**

Particulars	FY 2008-09 (A)	FY 2009-10 (A)	FY 2010-11 (A)
System Availability HVAC	99.28%	99.48%	99.63%
System Availability HVDC	93.55%	94.96%	97.62%

- 4.4.76 With regard to transmission constraint, MSEDCL further submitted that already the issues of constraints have been raised with MSETCL during various meetings. MSEDCL submitted the details of various meetings with STU and MSETCL officials.
- 4.4.77 MSEDCL submitted that it has planned to purchase power from various generating stations; however considering the past experience, there is no assurance that all generating stations will generate the projected energy generation which is calculated based on the capacity installed/tied up.
- 4.4.78 MSEDCL submitted the following table showing the comparison of actual power purchase quantum against the approved power purchase quantum excluding traders in past years.

**Table 65: Comparison of actual vis-a-vis approved power purchase quantum as submitted by MSEDCL**

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
	% Actual to Approved	% Actual to Approved	% Actual to Approved	% Actual to Approved
% Change in PP Quantum	-3.93%	-13.86%	-1.78%	-6.06%
<b>Power Purchase Quantum</b>				
Approved Quantum	80,572	90,206	84,641	90,792
Actual Quantum	77,402	77,706	83,135	85,294

- 4.4.79 MSEDCL submitted that from the above table, it is quite evident that the actual power purchase quantum is comparatively low as compared to approved power purchase quantum. MSEDCL further submitted that following computation was based on the average ratio of actual power available and approved quantum of power.

**Table 66: Average variation in actual Power Procurement with approved quantum as submitted by MSEDCL**

Particulars	Approved Quantum (MUs)	Actual Quantum (MUs)	% Actual to Approved
% Change in PP Quantum	86,553	80,884	-6.55%

- 4.4.80 MSEDCL submitted that in line with the above facts, it feels that the projected energy calculated based on the capacity tied-up and the plant load factor needs to be re-calculated on a conservative basis.
- 4.4.81 The Commission has already considered the issue of deviation of actual power purchase from the approved power purchase while arriving at the power purchase quantum from MSPGCL. As regards congestion in transmission network, MSEDCL has not presented substantial justification of its claims regarding the expected congestion in the intra-state transmission network. The Commission, in absence of enough justification of the above claim of MSEDCL, has not considered any congestion in Maharashtra STU network and thus has considered entire energy available at generation bus bar for projecting the power available to MSEDCL.
- 4.4.82 Based on the above analysis of the Commission on the submissions of MSEDCL on power purchase quantum and cost, the Commission approves the quantum and cost of power purchase for MSEDCL FY 2012-13 as follows.

**Table 67: Approved power purchase quantum and cost for FY 2012-13**

Sr. No.	Source of Power	Quantum of Energy available at generation bus-bar (MUs)	Total Cost (Rs. crore)	Rate per unit of power procured (Rs/kWh)
1	MSPGCL	47,663	14,986	3.14
2	KSTPS	5,400	763	1.41
3	KSTPS III	687	187	2.73
4	VSTP I	3,516	783	2.23
5	VSTP II	2,940	647	2.20
6	VSTP III	2,400	614	2.56
7	VSTP IV	381	159	4.17
8	KAWAS	1,080	442	4.10
9	GANDHAR	1,020	442	4.33
10	KhSTPS-II	720	295	4.09
11	SIPAT TPS	4,983	1,016	2.04
12	Mauda	-	-	-
13	Barh	-	-	-
	<b>NTPC</b>	<b>23,127</b>	<b>5,349</b>	<b>2.31</b>
14	KAPP	760	181	2.37
15	TAPP 1&2	1,280	135	1.06
16	TAPP 3&4	3,293	992	3.01
	<b>NPCIL</b>	<b>5,333</b>	<b>1,308</b>	<b>2.45</b>
17	SSP	990	203	2.05



Sr. No.	Source of Power	Quantum of Energy available at generation bus-bar (MUs)	Total Cost (Rs. crore)	Rate per unit of power procured (Rs/kWh)
18	PENCH	72	15	2.05
19	DODSON I	42	9	2.18
20	DODSON II	89	15	1.73
21	RGPPL	5,256	3,053	5.81
22	IPP - JSW	1,934	685	3.54
23	Mundra UMPP	1,738	393	2.26
24	MEDIUM-TERM	3,141	1,288	4.10
25	Adani power	1,143	292	2.55
26	POWERGRID	-	960	
27	Reactive Energy Ch	-	(4)	
28	WHEELING CHARGES	-	4	
	<b>Total</b>	<b>90,528</b>	<b>28,556</b>	<b>3.15</b>
29	Non Conv. Energy Excl CPP	7,744	3,496	4.52
30	CPP	900	383	4.25
31	Short Term through traders/exchanges	10,675	4,804	4.50
	<b>TOTAL PP INCLUDING NCE</b>	<b>109,847</b>	<b>37,238</b>	<b>3.39</b>

#### 4.5 Transmission charges and SLDC charges for FY 2011-12 and FY 2012-13

- 4.5.1 MSEDCL submitted that it estimated the transmission charges and SLDC charges for FY 2011-12 and FY 2012-13 at Rs. 2,199 crore as per Order in Case. No. 102 of 2009.
- 4.5.2 For FY 2011-12, the Commission has considered the transmission charges as approved in Case No. 102 of 2009, which amounts to Rs. 2,185 crore (Rs. 182.08 crore per month). The Commission had further considered Rs. 15.03 crore as SLDC charges as approved by the Commission in Case No. 90 of 2010.
- 4.5.3 On 21 May, 2012, the Commission issued its Order in the matter of “Suo motu Determination of Transmission Tariff for Intra-State Transmission System (InSTS) for FY 2012-13 of the second MYT Control Period” and determined that the monthly transmission charges payable by MSEDCL to be Rs. 272.69 crore per month. The Order came into effect from 1 June, 2012. Therefore, for FY 2012-13, the Commission considered Rs. 182.08 crore for the months of April and May 2012 as approved in Order in Case No. 102 of 2009 and Rs. 272.69 crore for the remaining 10 months of FY 2012-13. Therefore, the approved transmission charges for FY 2012-13 are Rs. 3,091 crore.
- 4.5.4 The Commission has further approved Rs. 14.25 crore as the SLDC charges for FY 2012-13 as per the SLDC budget approved for FY 2012-13 vide Order dated 30 March, 2012. The approved transmission charges including SLDC charges for FY 2011-12 and FY 2012-13 is as shown below.

**Table 68: Transmission charges including SLDC charges for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Transmission charges	2,185	2,185	2,185	2,991
SLDC charges	14	15	14	14
Total	2,199	2,200	2,199	3,105

**4.6 O&M expenses for FY 2011-12 and FY 2012-13**

4.6.1 Operation & maintenance (O&M) expenditure comprise employee expenses, A&G expenses and R&M expenses. MSEDCL has submitted the projected O&M expenses under each of these heads for FY 2011-12 and FY 2012-13. MSEDCL's submission and Commissions ruling on each head of O&M expenses is given below.

**Employee Expenses**

4.6.2 MSEDCL has submitted that it has estimated the employee expenses considering the trend of the previous year's employee costs, increase in dearness allowance, its merger and its impact on other allowances such as HRA, field allowances, PF, CPF, etc. MSEDCL further submitted that in addition to the above, increase in salary due to regular increments as well as promotion has also been considered.

4.6.3 MSEDCL submitted that the projections are based on actual strength of employees of MSEDCL. Further MSEDCL submitted the following assumptions it has considered for projecting the expenses under various sub-heads of employee expenses.

**“Basic Salary:** A normal increase of 4% per annum is assumed due to release of periodical increment and fitment of basic on promotions

**Dearness Allowance:** 51% Dearness Allowance was applicable on 1 April 2011. It has increased by 7% on June, 2011 and it is assumed that it will be further increased by 7% w.e.f. January 2012. Considering this trend, weighted average Dearness allowance as 58% has been considered for the year FY 2011-12. It is estimated that the rate of D.A. prevailing on 1 April, 2012 will be 65%. Further, it will increase in the month of June, 2012 and January, 2013. Hence the projected weighted average DA for FY 2012-13 has been considered as 72%.

**HRA:** HRA has been projected considering the average percentage of HRA to Basic Salary which is estimated at 15%.

**Overtime payment and other allowances:** As part of austerity measures, the MSEDCL has stopped payment of overtime to office staff. Overtime is payable only for the line staff in the field, the incidence of which is also not very high. Accordingly, the overtime payments have been projected to increase at the nominal rate of 11% per annum over the previous year levels. Similarly the other

allowances and staff welfare expenses have also been projected to increase at the nominal rate of 4% per annum.

**Gratuity:** Normal increase of 15% has been considered.

**Leave Encashment:** Normal increase of 15% has been considered.

**Contribution to provident fund:** Contribution to provident fund has been considered at the rate of 12% of closing balance of Basic and D.A.”

4.6.4 The following table presents the sub-head wise employee expenses as projected by MSEDCL.

**Table 69: Employee expenses for FY 2011-12 and FY 2012-13 as projected by MSEDCL**

(Rs. crore)

Sr. No.	Particulars	FY 2011-12 H1 (Actual)	FY 2011-12 H2 (Estimated)	FY 2011-12 Total (Estimated)	FY 2012-13 (Projected)
1	Basic Salary	603	647	1,249	1,299
2	Dearness Allowance (DA)	323	401	725	936
3	House Rent Allowance	88	99	187	195
4	Conveyance Allowance	5	7	12	13
5	Leave Travel Allowance	1	1	1	1
6	Earned Leave Encashment	76	104	180	207
7	Other Allowances	46	42	88	91
8	Medical Reimbursement	6	16	22	23
9	Overtime Payment	10	16	27	31
10	Bonus/Ex-Gratia Payments	-	41	41	41
11	Interim Relief / Wage Revision	-	-	-	-
12	Staff welfare expenses	8	7	14	15
13	VRS Expenses/Retrenchment Compensation	-	-	-	0
14	Commission to Directors	-	-	-	-
15	Training Expenses	-	-	-	-
16	Payment under Workmen's Compensation Act	1	1	2	2
17	Net Employee Costs	1,166	1,383	2,549	2,855
18	Terminal Benefits	-	-	-	-
18.1	Provident Fund Contribution	115	121	237	268
18.2	Provision for PF Fund	-	-	-	-
18.3	Pension Payments	0	0	1	1
18.4	Gratuity Payment	124	175	300	345
19	Others	10	18	28	30

Sr. No.	Particulars	FY 2011-12 H1 (Actual)	FY 2011-12 H2 (Estimated)	FY 2011-12 Total (Estimated)	FY 2012-13 (Projected)
20	Gross Employee Expenses	1,416	1,699	3,115	3,498
21	Less: Expenses Capitalised	284	347	630	669
22	Net Employee Expenses	1,133	1,352	2,485	2,829

- 4.6.5 The Commission asked MSEDCL to justify why it has considered an increase of 15% in gratuity and leave encashment for FY 2011-12 and FY 2012-13. MSEDCL submitted that the amount of gratuity & leave encashment for the FY 2011-12 & FY 2012-13 have been estimated with a nominal increase of 15% taking into account the increase in dearness allowance, annual increments, increment due to promotions, etc.
- 4.6.6 The Commission asked MSEDCL to provide the details of the percentage of DA as on 1 January 2012, 1 April 2012 and 1 June 2012. The following are the details as submitted by MSEDCL.

**Table 70: DA details provided by MSEDCL**

Date	Prevailing Dearness Allowance (percentage)
1 January, 2012	58%
1 April, 2012	65%
1 June, 2012	65%

- 4.6.7 MSEDCL further submitted that though 7% increase in DA has been implemented in April 2012, it was to be given from January 2012. The GoM as well as the Company has not given the benefit to its employees for 3 months, i.e., January to March 2012. MSEDCL further added that an increase in DA is due in the month of July 2012 which is estimated to be increased by 7%.
- 4.6.8 Regarding the methodology of capitalisation of O&M expenses, MSEDCL in one of the queries raised by the Commission, replied as follows:  
*“Methodology of capitalisation of Employee Expenses and Administrative and General Expenses: 15% of addition to Work in Progress during the year is added to Work in Progress towards capitalisation of Employee Cost and Administrative and General Expenses and is credited to employees cost and Administrative and General Expenses in the pre-determined ratio. Thus the capitalisation of O&M Expenditure is related to the addition to work in progress i.e. capital expenditure incurred during the year and not actual capitalisation of asset. It may be noted that capitalisation can be from the work in progress of earlier”*
- 4.6.9 The Commission, in earlier Sections, has explained its stand on adopting the inflation norms for approving the O&M Expenses while approving the ARR of the licensees. The Commission, for approving the O&M Expenses for FY 2011-12 and FY 2012-13 also, has considered the same principle adopted by the Commission in its previous Tariff Orders.
- 4.6.10 For projecting the employee expenses for FY 2011-12, the Commission has considered the increase in point to point inflation between March 2011 and March

- 2012 in the Consumer Price Index for Industrial Workers (as per the Labour Bureau, Government of India). The growth rate in the said index works out to 8.65%. The Commission has escalated the trued-up employee expenses for FY 2010-11 by 8.65% to arrive at the approved gross employee expenses for FY 2011-12.
- 4.6.11 For projecting the employee expenses for FY 2012-13, the Commission has considered the CAGR of Consumer Price Index for Industrial Workers between March 2007 and March 2012. The five year CAGR so computed, which works out to 9.62%, is applied on the approved gross employee expenses for FY 2011-12 to arrive at the gross employee expenses for FY 2012-13.
- 4.6.12 The Commission has considered the capitalisation of employee expenses as projected by MSEDCL for FY 2011-12 and FY 2012-13. The employee expenses for FY 2011-12 and FY 2012-13, as projected by MSEDCL and as approved by the Commission are given in the table given below.

**Table 71: Employee expenses for FY 2011-12 and FY 2012-13***(Rs. crore)*

Sr. No.	Particulars	FY 2011-12		FY 2012-13	
		As submitted by MSEDCL	As approved by the Commission	As submitted by MSEDCL	As approved by the Commission
1	Gross employee expenses	3,115	2,834	3,498	3,107
2	Less: Employee expenses capitalised	630	630	669	669
3	Net employee expenses	2,485	2,204	2,829	2,438

**A&G Expenses**

- 4.6.13 MSEDCL has estimated the gross A&G expenses for FY 2011-12 and FY 2012-13 at Rs. 507 crore and Rs. 579 crore respectively. The break-up of A&G expenses as submitted by MSEDCL is given below.

**Table 72: A&G Expenses for FY 2011-12 and FY 2012-13 as submitted by MSEDCL***(Rs. crore)*

Sr. No.	Particulars	FY 2011-12 H1 (Actual)	FY 2011-12 H2 (Estimated)	FY 2011-12 Total (Estimated)	FY 2012-13 (Projected)
1	Rent Rates & Taxes	21	33	54	59
2	Insurance	0	0	0	0
3	Telephone & Postage, etc.	9	10	20	22
4	Legal charges & Audit	5	8	13	14

Sr. No.	Particulars	FY 2011-12 H1 (Actual)	FY 2011-12 H2 (Estimated)	FY 2011-12 Total (Estimated)	FY 2012-13 (Projected)
	fee				
5	Professional, Consultancy, Technical fee	6	8	14	16
6	Conveyance & Travel	10	12	22	28
7	Electricity charges	8	10	17	19
8	Water charges	2	3	4	5
9	Security arrangements	16	26	42	46
10	Fees & subscription	20	1	21	23
11	Books & periodicals	0	0	0	0
12	Computer Stationery	31	35	66	82
13	Printing & Stationery	8	9	17	19
14	Advertisements	5	6	12	15
15	Purchase Related Advertisement Expenses	-	-	-	-
16	Contribution/Donations	-	-	-	-
17	License Fee and other related fee	0	0	0	0
18	Vehicle Running Expenses Truck / Delivery Van	5	6	11	14
19	Vehicle Hiring Expenses Truck / Delivery Van	14	15	29	36
20	Cost of services procured	-	-	-	-
21	Outsourcing of metering and billing system	34	38	72	80
22	Freight On Capital Equipments	1	1	2	2
23	V-sat, Internet and related charges	-	-	-	-
24	Training	-	-	-	-
25	Bank Charges	21	32	53	58
26	Miscellaneous Expenses	0	0	1	1
27	Office Expenses	4	6	11	12

Sr. No.	Particulars	FY 2011-12 H1 (Actual)	FY 2011-12 H2 (Estimated)	FY 2011-12 Total (Estimated)	FY 2012-13 (Projected)
28	Others	11	15	26	28
<b>29</b>	<b>Gross A&amp;G Expenses</b>	<b>230</b>	<b>276</b>	<b>507</b>	<b>579</b>
30	Less: Expenses Capitalised	54	66	120	137
<b>31</b>	<b>Net A&amp;G Expenses</b>	<b>176</b>	<b>210</b>	<b>387</b>	<b>442</b>

4.6.14 MSEDCL has submitted that considering the past trend, it has projected the A&G expenses for FY 2011-12 and FY 2012-13 considering 10% inflation in most of the sub-heads. MSEDCL further submitted that in case of certain expense sub-heads, i.e., conveyance and travel, computer stationary expenses, freight on capital equipment, vehicle running and vehicle hire expenses, it has considered an increase of 25% because of the increase in number of consumers, special recover drive, theft detection drive, public awareness, etc.

4.6.15 MSEDCL further added that for rents, rates and taxes, it has considered an increase of 17.5% considering the general trend of inflation. MSEDCL has claimed that it has not considered any increase in statutory audit fees, but the company has appointed internal auditors for the field offices for FY 2011-12 and onwards, for which it has considered 40% increase in professional, consultancy and technical fees. MSEDCL submitted that it has considered an increase of 25% over advertisement expenses of FY 2010-11 for projecting the expenditure under this head for FY 2011-12 and FY 2012-13.

4.6.16 The Commission asked MSEDCL to justify the high increase of 25% in certain heads of A&G expenses. MSEDCL replied that for expense sub-heads for which an increase of 25% has been considered, there are special reasons apart from normal inflation such as rise in the prices of petrol & diesel, increase in number of consumers, etc. Therefore, these expenses have been estimated at higher rate. MSEDCL submitted that special reasons for higher projected increase in advertisement expenses for FY 2012-13 are as follows:

*“As the load shedding protocol is revised from time to time, all O&M Divisions are required to publish revised load shedding time table in detail in local newspapers on each occasion of revision.*

*The company has decided to publish the proposed DTC locations for information of general public. All O&M Divisions publish the same in local newspapers. These advertisements are quite big in size.*

*Ever increasing various types of infra activities call for publication of tender advertisement on and often”*

4.6.17 The Commission asked MSEDCL to justify this steep 17.5% rise in “Rents, Rates and Taxes” for FY 2011-12. MSEDCL submitted that the increase has been considered keeping in view the opening of some of the new offices on rental basis apart from general trend of inflation.

- 4.6.18 As explained earlier, the Commission, for approving the O&M expenses for FY 2011-12 and FY 2012-13, has considered the same norms which were adopted by the Commission in its previous ARR Orders. Since capitalisation rate of MSEDCL has varied widely from year to year, the Commission has estimated the net A&G expenses instead of the estimating gross A&G expenses.
- 4.6.19 For projecting the A&G expenses for FY 2011-12, the Commission has considered the weighted average increase in point to point inflation between March 2011 and March 2012 in the Consumer Price Index for Industrial Workers (40%) and Wholesale Price Index (60%). The growth rate in the said index works out to 8.07%. The Commission has escalated the approved net A&G expenses for FY 2010-11 by 8.07% to arrive at the approved A&G expenses for FY 2011-12.
- 4.6.20 For projecting the A&G expenses for FY 2012-13, the Commission has considered the weighted average CAGR of Consumer Price Index for Industrial Workers (40%) and Wholesale Price Index (60%) between March 2007 and March 2012. The five year weighted average CAGR so computed, which works out to 8.27%, is applied on the approved net A&G expenses for FY 2011-12 to arrive at the net A&G expenses for FY 2012-13.
- 4.6.21 The A&G expenses for FY 2011-12 and FY 2012-13, as projected by MSEDCL and as approved by the Commission are given in the table given below.

**Table 73: Approved A&G Expenses for FY 2011-12 and FY 2012-13***(Rs. crore)*

Sr. No.	Particulars	FY 2011-12		FY 2012-13	
		As submitted by MSEDCL	As approved by the Commission	As submitted by MSEDCL	As approved by the Commission
1	Net A&G Expenses	387	290	442	314

**R&M Expenses**

- 4.6.22 MSEDCL submitted that it has projected the R&M expenses for FY 2011-12 and FY 2012-13 considering an increase of 10% over the actual expenses for FY 2010-11. MSEDCL submitted that it has considered 10% increase based on the present trend of inflation. MSEDCL has not considered any capitalisation of the R&M Expenses.
- 4.6.23 For projecting the R&M expenses for FY 2011-12, the Commission has considered the increase in point to point inflation between March 2011 and March 2012 in the Wholesale Price Index. The growth rate in the said index works out to 7.69%. The Commission has escalated the approved R&M expenses for FY 2010-11 by 7.69% to arrive at the approved R&M expenses for FY 2011-12.
- 4.6.24 For projecting the R&M expenses for FY 2012-13, the Commission has considered the CAGR of Wholesale Price Index between March 2007 and March 2012. The five year weighted average CAGR so computed, which works out to 7.38%, is applied on the approved R&M expenses for FY 2011-12 to arrive at the net R&M expenses for FY 2012-13.



- 4.6.25 The R&M expenses for FY 2011-12 and FY 2012-13, as projected by MSEDCL and as approved by the Commission are given in the table given below.

**Table 74: Approved R&M expenses for FY 2011-12 and FY 2012-13**

(Rs. crore)

Sr. No.	Particulars	FY 2011-12		FY 2012-13	
		As submitted by MSEDCL	As approved by the Commission	As submitted by MSEDCL	As approved by the Commission
1	Net R&M Expenses	566	569	622	611

**Total O&M Expenses**

- 4.6.26 The total O&M expenses for FY 2011-12 and FY 2012-13, as projected by MSEDCL and as approved by the Commission are presented in the table given below.

**Table 75: Approved O&M Expenses for FY 2011-12 and FY 2012-13**

(Rs. crore)

Sr. No.	Particulars	FY 2011-12		FY 2012-13	
		As submitted by MSEDCL	As approved by the Commission	As submitted by MSEDCL	As approved by the Commission
1	Employee Expenses	2,485	2,204	2,829	2,438
2	A&G Expenses	387	290	442	314
3	R&M Expenses	566	569	622	611
3	Total O&M Expenses	3,437	3,063	3,893	3,362

**4.7 Capital expenditure and Capitalisation for FY 2011-12 and FY 2012-13**

- 4.7.1 MSEDCL has estimated the capitalisation for FY 2011-12 and FY 2012-13 to be Rs. 5,987 crore and Rs. 6,436 crore respectively. The estimated capital expenditure and capitalisation as submitted by MSEDCL for FY 2011-12 and FY 2012-13 is as shown below.

**Table 76: Capitalisation in FY 2011-12 and FY 2012-13**

(Rs. crore)

Sr. No.	Scheme code No.	Capital Expenditure during FY 2011-12	Capitalisation during FY 2011-12	Capital Expenditure during FY 2012-13	Capitalisation during FY 2012-13
1	Infrastructure Plan works I	3,500	2,490	2,500	2,494

Sr. No.	Scheme code No.	Capital Expenditure during FY 2011-12	Capitalisation during FY 2011-12	Capital Expenditure during FY 2012-13	Capitalisation during FY 2012-13
2	Gaothan Feeder Separation Scheme - Phase I	-	69	-	14
3	Gaothan Feeder Separation Scheme - Phase II	50	393	-	79
4	Gaothan Feeder Separation Scheme - Phase III	75	93	-	19
5	Fixed Capacitor Scheme	-	-	-	-
6	AMR	5	7	10	9
7	FMS	-	0	-	0
8	APDRP				
	Phase-I & II	-	408	-	82
	R-APDRP A	240	198	77	101
	R-APDRP B	30	24	1,420	1,141
9	Internal Reform				
	DTC Metering	-	-	-	-
	Phase-II ( Part I & II )	-	2	-	0
	Phase-III	41	57	-	11
10	MIS	3	3	14	12
11	DRUM	-	2	-	0
12	Load Management	-	6	-	1
13	Distribution Scheme	-	-	-	-
a	P.F.C.Urban Distribution Scheme	-	19	-	4
b	MIDC Interest free Loan Scheme	-	20	-	4
c	Evacuation	240	196	258	246
d	Evacuation Wind Generation (Captive Power)	35	28	4	9
14	RGGVY	78	228	-	46

Sr. No.	Scheme code No.	Capital Expenditure during FY 2011-12	Capitalisation during FY 2011-12	Capital Expenditure during FY 2012-13	Capitalisation during FY 2012-13
15	R E Dist	-	-	-	-
	I- R E / N D				
a	DPDC / Non-Tribal	-	32	-	6
b	DPDC / SCP	30	42	21	25
c	DPDC / TSP + OTSP	53	66	40	45
d	Rural Electrification ( Grant )	8	7	-	1
e	SPA:PE	600	658	500	532
f	P:SI	122	150	196	187
g	P:IE	70	75	85	83
h	JBIC	4	9	-	2
16	Back log	269	236	124	146
17	Elimination of 66 kV line	55	44	62	58
18	Infra Plan Works – II	-	-	500	400
19	GFSS IV	350	280	325	316
20	LT Capacitor Scheme II	45	36	-	7
21	ERP	5	4	15	13
22	Single Phasing - Left Out villages	50	60	210	180
23	GFSS (Shrirampur)	25	20	40	36
24	Special Action Plan (Nandurbar District)	15	12	26	23
25	SCADA Part –A	17	14	127	104
	<b>Total</b>	<b>6,015</b>	<b>5,987</b>	<b>6,554</b>	<b>6,436</b>

4.7.2 For three of the schemes, namely SPA:PE (Special Project for Agricultural pump electrification, P:SI (Project for System Improvement) and P:IE (Project for intensive electrification, MSEDCL has not provided the breakup between the capitalisation under DPR schemes and the capitalisation under Non-DPR schemes

for FY 2011-12 and FY 2012-13. For the purpose of approving capitalisation under these schemes in FY 2011-12 and FY 2012-13, the Commission has considered the same ratio of DPR and Non-DPR schemes as observed in FY 2010-11. The actual capitalisation under DPR/ Non-DPR schemes will be considered in the Truing-up process subject to prudence check.

**Table 77: Breakup in capitalisation between DPR and Non-DPR schemes**

Particulars	FY 2010-11		Ratio considered for FY 2011-12 and FY 2012-13
	Capitalisation (Rs. crore)	% of capitalisation	
Capitalisation under DPR schemes for SPA:PE, P:SI and P:IE	493.51	85%	85%
Capitalisation under Non-DPR schemes for SPA:PE, P:SI and P:IE	86.34	15%	15%
<b>Total</b>	<b>579.85</b>	<b>100%</b>	<b>100%</b>

4.7.3 The Commission observed that majority of the capitalisation estimated by MSEDCL for FY 2011-12 and FY 2012-13 is on account of schemes for which the in-principle approval has been accorded by the Commission. MSEDCL has also provided the cost-benefit analysis of the schemes for which in-principle approval has been granted by the Commission. The breakup of capitalisation submitted by MSEDCL under DPRs approved and Non-DPR schemes for FY 2011-12 and FY 2012-13 is as shown below.

**Table 78: Summary of capitalisation for FY 2011-12 and FY 2012-13 as submitted by MSEDCL**

Particulars	FY 2011-12		FY 2012-13	
	Capitalisation (Rs. crore)	% of capitalisation	Capitalisation (Rs. crore)	% of capitalisation
DPRs approved	5,095	84%	5,314	83%
Non-DPR schemes	892	16%	1,122	17%
Total	5,987	100%	6,436	100%

4.7.4 The Commission observes that more than 80% of the capitalisation is proposed in schemes for which in-principle approval has been granted by the Commission and for which the cost-benefit analysis has been submitted by MSEDCL. Hence, for the purpose of determination of ARR for FY 2011-12 and FY 2012-13, the Commission approves the capitalisation of all DPR schemes as submitted by MSEDCL. However, the Commission will consider the actual capitalisation on account of DPR schemes during the truing-up of FY 2011-12 and FY 2012-13 respectively, subject to prudence check.

- 4.7.5 The capitalisation on account of Non-DPR schemes as percentage of capitalisation of approved DPR schemes is less than 20% for both FY 2011-12 (16%) and FY 2012-13 (17%). Hence, at this stage the Commission is approving the capitalisation proposed by MSEDCL under Non-DPR schemes for FY 2011-12 and FY 2012-13. The capitalisation approved for FY 2011-12 and FY 2012-13 is as below:

**Table 79: Capitalisation for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Capitalisation	5,987	5,987	6,436	6,436

#### 4.8 Depreciation for FY 2011-12 and FY 2012-13

- 4.8.1 MSEDCL has estimated the depreciation for FY 2011-12 and FY 2012-13 to be Rs. 858 and Rs. 1,086 crore respectively. MSEDCL estimated the average depreciation rate for FY 2011-12 at 3.65%, which is the same as the average depreciation rate in FY 2010-11. For FY 2011-12 and FY 2012-13, the Commission has considered the average depreciation rate as submitted by MSEDCL.
- 4.8.2 For FY 2011-12, the Commission has taken the opening balance of GFA to be the approved closing balance of GFA of FY 2010-11. For FY 2011-12 and FY 2012-13, the Commission has computed depreciation based on the approved closing balance of GFA for FY 2010-11 and FY 2011-12 respectively.
- 4.8.3 In addition to the depreciation, MSEDCL has claimed an amount of Rs. 156 crore and Rs. 223 crore as Advance Against Depreciation (AAD) for FY 2011-12 and FY 2012-13 respectively. However, the Commission noticed that MSEDCL had not submitted the required information as required in Form 4 of the Tariff filing formats. The Commission raised a query in this regard to which MSEDCL replied the following:

*“45. For the purpose of estimation of AAD for FY 2011-12 and FY 2012-13, MSEDCL has mentioned that the estimate of AAD is as per actual capitalisation and capital expenditure. MSEDCL needs to provide computation details considering the format as provided in form 4 for advance against depreciation (line 160-179). MSEDCL needs to provide all the details as required in the format and should not leave any information field blank.*

*MSEDCL Reply:*

*“MSEDCL states that row 160 to 179 includes certain items like cumulative depreciation at the end of the year, cumulative loan repayment at the end of the year, excess of cumulative loan repayment over cumulative depreciation*

*cumulative 'Advance Against Depreciation' at the beginning of the year, reduction in 'Advance Against Depreciation' during the year etc. MSEDCL needs to understand that whether the cumulative figures of assets, depreciation, loan or AAD to be given from 2005-06 i.e. Unbundling of MSEB or from the beginning. However, the figures available with MSEDCL will be from FY 2005-06 only when MSEDCL came into existence which may not highlight the cumulative depreciation claimed and cumulative loan repayment against the total GFA.*

*Further, the Hon'ble Commission previously has approved capital expenditure and Capex related expenses based on the opening GFA, opening balance of loan, funding pattern for capital expenditure schemes which were finalised after approving the capitalisation of 50% of capitalisation against the DPR Schemes and 20% on the capitalisation of Non DPR Schemes. So the actual expenditure did not get captured in various Tariff Orders of Hon'ble Commission. In addition to this Hon'ble Commission has appointed Administrative Staff College of India (ASCI), Hyderabad, as an Independent Agency to conduct a scrutiny of the completed capital expenditure schemes on sample basis. Based on the finding of ASCI in regard to efficiency of project management, time and cost overrun, etc. the Hon'ble Commission may revisit the capitalisation allowed in previous Orders. So the capitalization and other capital expenditure related expenses are not yet finalized by the Hon'ble Commission itself. So there is no point in submitting the figures which not yet finalized."*

- 4.8.4 In the absence of information on cumulative repayment of loan, cumulative loans taken and excess of cumulative loans over cumulative depreciation, which is required for estimating the AAD, the Commission has determined the AAD on the basis of maximum of approved depreciation and repayment for the purpose of determination of ARR for FY 2011-12 and FY 2012-13. The Commission, however, directs MSEDCL to furnish the information on AAD as required in Form 4 of the Tariff filing formats during the truing-up of the respective years. MSEDCL is required to furnish details of the cumulative loans taken and repayment, accumulated depreciation, AAD and all information required in Form 4 of the formats for each of the following three cases, (i) for all the on-going schemes, (ii) all schemes from FY 2005-06 as per actual, and (iii) estimates from the MSEB period, based on certain capital expenditure funding assumptions, if information is not available with MSEDCL.
- 4.8.5 Accordingly, the Commission approves depreciation, including AAD for FY 2011-12 and FY 2012-13 which is as shown below.

**Table 80: Depreciation for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Opening GFA	20,499.65	19,316.57	26,486.98	25,303.90

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Addition to GFA during the year	5,987.33	5,987.33	6,436.36	6,436.36
Retirement of assets during the year	-	-	-	-
Closing GFA	26,486.98	25,303.90	32,923.34	31,740.26
Depreciation	858.49	815.25	1,085.65	1,042.41
Depreciation (as a % of Average GFA)	3.65%	3.65%	3.65%	3.65%
Repayment	1,014.09	1,014.09	1,309.05	1,309.05
AAD	155.61	198.84	223.40	266.64
Depreciation + AAD	1,014.09	1,014.09	1,309.05	1,309.05

#### 4.9 Interest expenses for FY 2011-12 and FY 2012-13

- 4.9.1 MSEDCL has estimated the net interest expense on long-term loans for FY 2011-12 and FY 2012-13 to be Rs. 828 and Rs. 1,102 crore respectively. The estimated loan addition during FY 2011-12 and FY 2012-13 is Rs. 4,524 crore and Rs. 5,375 crore respectively.
- 4.9.2 MSEDCL did not submit the amount of consumer contribution and grants to the capital expenditure for either year. The Commission raised this query and MSEDCL provided the following details of the funding pattern of capital expenditure.

**Table 81: Funding pattern as submitted by MSEDCL**

(Rs. crore)

Sr. No.	Particulars	FY 2011-12	FY 2012-13
1	Consumer contribution (CC)	250.00	180.00
2	Grants received during the year	197.00	280.32
3	Equity	1,043.86	718.70
4	Debt	4,523.95	5,374.83
	Capital Expenditure	6,014.81	6,553.85

- 4.9.3 The Commission has considered the funding pattern for capitalisation for FY 2011-12 and FY 2012-13 in the same ratio as that of the capital expenditure. Accordingly total loan addition approved for FY 2011-12 and FY 2012-13 was adjusted based on the ratio of approved capitalisation to actual capital expenditure. The funding pattern for capitalisation for FY 2011-12 and FY 2012-13 approved for MSEDCL is as under:

**Table 82: Funding pattern of Capitalisation for FY 2011-12 and FY 2012-13**

(Rs. crore)

Sr. No.	Particulars	FY 2011-12	FY 2012-13
1	Capitalisation approved	5,987.33	6,436.36
2	As a % of Capital Expenditure	99.5%	98.2%
3	Consumer contribution (CC)	248.86	176.77
4	Grants received during the year	196.10	275.29
5	Equity	1,039.09	705.82
6	Debt	4,503.28	5,278.47

- 4.9.4 The interest rate for the long-term loans has been considered as per the estimated effective interest rate of MSEDCL for FY 2011-12 and FY 2012-13, arrived by dividing the gross interest expense by the average balance of opening and closing loans for the respective years. The summary of the interest expenses for long-term debt approved for FY 2011-12 and FY 2012-13 is as follows:

**Table 83: Interest on long-term debt for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Op. Balance	8,170.81	5,795.45	11,680.66	9,284.64
Additions	4,523.95	4,503.28	5,374.83	5,278.47
Repayments	(1,014.09)	(1,014.09)	(1,309.05)	(1,309.05)
Cl. Balance	11,680.66	9,284.64	15,746.45	13,254.06
Gross Interest Expense	1,056.61	802.65	1,371.30	1,126.89
Less: IDC	(229.03)	-	(269.08)	-
Net Interest Expense	827.58	802.65	1,102.22	1,126.89
Average Interest Rate (%)	10.6%	10.6%	10.0%	10.0%



#### 4.10 Interest on working capital and Consumers' Security Deposits and Other Interest and Finance Charges

4.10.1 MSEDCL has estimated the interest on working capital to be Rs. 354 crore per year for FY 2011-12 and FY 2012-13. The Tariff Regulations, 2005 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 (as per its books of accounts), and the credit period of one-month considered on power purchase expenses, the normative working capital requirement works out to be negative for FY 2011-12. Hence, the Commission has considered the interest on working capital as NIL for FY 2011-12. In FY 2012-13, however, the working capital requirement for MSEDCL turns out to be greater than zero (0). At the date of filing the Petition, the SBI PLR, according to the information available on the website of SBI(<https://www.sbi.co.in/>) was 14.75%. Hence, the Commission has considered the interest rate on working capital at 14.75% for FY 2012-13.

4.10.2 MSEDCL has estimated the interest on consumer security deposits as 6% per annum for both FY 2011-12 and FY 2012-13 in-line with the previous Tariff Order in Case No. 111 of 2009. Since, FY 2011-12 is completed, the Commission has considered a 6% interest on interest on consumer security deposits for FY 2011-12.

4.10.3 For FY 2012-13, the interest rate considered by MSEDCL is 6%. However, on the date of filing this Petition, the bank rate was 9.5% as per the information available on the Reserve Bank of India (RBI) website <http://www.rbi.org.in> . The Tariff Regulations, 2005 state that

*"76.8.3 Interest shall be allowed on the amount held as security deposit from Distribution System Users and consumers at the Bank Rate as at the date on which the application for determination of Tariff is made."*

4.10.4 Therefore, for estimating interest on consumer security deposits, the Commission has considered an interest of 9.5% of the average balance of consumer security deposits in FY 2012-13 as projected by MSEDCL. The Commission, therefore, directs MSEDCL to pay an interest rate of 9.5% on the consumer security deposits for FY 2012-13.

4.10.5 With regard to other interest and finance charges for FY 2011-12 and FY 2012-13, MSEDCL has submitted the following:

*"Guarantee Charges: Guarantee Charges of Rs. 14.33 crore. for the FY 2010-11 (for existing Loans only) is actually worked out against those loans which are under GoM Guarantee. This includes the loans from PFC & REC. The charges are calculated at the rate of 1% and 2% as indicated in GoM Resolution on outstanding balance and Interest on particular date respectively. Since GOM is not giving any further Guarantees same level of guarantee fee is estimated for FY 2011-12 and FY 2012-13.*

*Finance Charges: For the current year the bank and other charges actual incurred and reflected in the account are in the tune of Rs. 25.34. The same is increased by 25% more for FY 2011-12 and FY 2012-13 considering the new LC required to be given to the Power Suppliers...*

....

*Stamp Duty : The actual stamp duty for the FY 2010-11 was to the tune of Rs. 5.93 crore., considering the impact of the Bombay Stamp Act on new documentation for availing Long-term Loans and Working Capital Finance, 100% rise over the FY 2010-11 is considered for projections FY 2011-12 & FY 2012-13 i.e. Rs. 11.86 crore. respectively.”*

- 4.10.6 For the purpose of determination of ARR, the Commission has considered the projections for other interest and finance charges for FY 2011-12 and FY 2012-13 as submitted by MSEDCL. The Commission will consider the actual other interest and finance charges at the time of Truing up for FY 2011-12 and FY 2012-13 respectively. Thus, the interest on working capital, other interest and finance charges including interest on consumers’ security deposit, approved by the Commission for FY 2011-12 and FY 2012-13 is as shown below.

**Table 84: Interest on Working Capital, Consumers’ Security Deposit and other interest and finance charges for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Interest on Working Capital	353.81	-	353.81	49.89
Interest on Security deposit	271.72	259.37	298.89	451.73
Guarantee charges	14.33	14.33	14.33	14.33
Finance charges	31.67	31.67	31.67	31.67
Stamp duty	11.86	11.86	11.86	11.86
Service fee	-	-	-	-
Total Other Interest and finance charges	683.39	317.23	710.56	559.49

## 4.11 Incentives and Discounts

- 4.11.1 The actual incentive/ discounts paid to consumers were Rs. 143 crore in FY 2010-11. For FY 2011-12 and FY 2012-13, MSEDCL has considered a 5% increase in the amount of incentives/ discounts to be paid to consumers. The Commission has accepted MSEDCL’s submission and approves a 5% escalation year-on-year over the approved amount of incentives/ discounts for FY 2010-11. The approved incentives/ discounts for FY 2011-12 and FY 2012-13 is as shown below:

**Table 85: Incentives/Discounts for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Incentives/Discounts	150	150	158	157

#### 4.12 Other expenses for FY 2011-12 and FY 2012-13

- 4.12.1 MSEDCL has estimated that the “Other expenses” for FY 2011-12 at Rs. 10 crore, considering a 5% increase in the actual other expenses excluding intangible assets written off. It also estimated other expenses to be at Rs. 11 crore for FY 2012-13, considering a 5% increase over the estimates for FY 2011-12.
- 4.12.2 The Commission has approved other expenses considering a 5% escalation each year over the approved level of other expenses for FY 2010-11.

**Table 86: Other expenses for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Other expenses	10	9	11	9

#### 4.13 RLC Refund

- 4.13.1 MSEDCL estimated the RLC refund for FY 2011-12 to be Rs. 443 crore. For FY 2012-13, MSEDCL has considered no RLC refund. MSEDCL submitted the following:

*“3.18.5 Last two years have seen wide increase in the rates of primary fuel and hence there has been a steep increase in the power purchase cost. This steep increase has resulted in higher Tariff for the consumers since almost 80% for the ARR pertains to power purchase cost and transmission cost.*

*3.18.6 As decided by the Hon’ble Commission, RLC refund has to be catered through the Tariff mechanism and as such the same needs to be recovered from consumers, which is then subsequently refunded to select group of consumers namely Commercial and Industrial, which are both subsidizing categories.*

*3.18.7 In view of the reasons mentioned in foregoing paragraphs and the necessity of reducing the impact of Tariff, MSEDCL had not projected any RLC refund for FY 2012-13. It is submitted that, MSEDCL is not proposing any provisioning for RLC refund for the financial year 2012-13 and hence is not submitting any changes in the Tariff Petition due to RLC Refund. Considering the amount of ARR, MSEDCL further requests the Hon’ble Commission to defer the RLC Refund.”*

- 4.13.2 For FY 2011-12, the Commission has accepted MSEDCL's estimate of RLC refund. For FY 2012-13, the Commission is of the view that there should not be a delay in the process of refunding the RLC amount since it would ultimately have to be refunded. The Commission asked MSEDCL to provide the total RLC amount yet to be refunded. MSEDCL submitted that out of a total RLC of Rs. 3,225 crore, an amount of Rs. 1,932 crore has been refunded so far. Hence, there is an amount of Rs. 1,293 crore still to be refunded. The Commission, in Case No. 111 of 2009 had approved an amount of Rs. 500 crore to be refunded for each year in FY 2009-10 and FY 2010-11. The extract of the Order is as shown below:

*"MSEDCL submitted that it has considered Rs 500 crore as a provision for refund of Regulatory Liability Charges (RLC) for FY 2009-10. MSEDCL also submitted that it has not considered any provision for RLC refund for FY 2010-11.*

*The Commission has considered the amount of Rs. 500 crore towards RLC refund in FY 2009-10 and FY 2010-11, since the contribution of RLC was in the nature of interest-free loans given by selected consumer categories to MSEDCL, which needs to be refunded."*

- 4.13.3 Therefore, according to the principle set out in previous Tariff Orders, the Commission has considered RLC refund of Rs. 500 crore for FY 2012-13. Further, in FY 2012-13, the Commission notes that there is an amount of Rs. 166.39 crore to be refunded to permanently disconnected (PD) consumers. The Commission directs MSEDCL to refund the amount pending to PD consumers in FY 2012-13 and provide a compliance report of the same within one (1) year of this Order.

**Table 87: RLC refund for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
RLC refund	443	443	---	500
RLC refund (PD consumers)	---	---	---	166
<b>Total</b>	<b>443</b>	<b>443</b>	<b>---</b>	<b>666</b>

#### 4.14 Provision for Bad Debts

- 4.14.1 MSEDCL submitted that the provision for bad debts as 1.5% of the estimated revenue for FY 2011-12 and 1.5% of the revenue from revised Tariffs for FY 2012-13. For FY 2011-12, MSEDCL has also claimed 1.5% as provision for bad debts on the revenue from sale of ZLS power. MSEDCL, in its Petition submitted that ZLS is also an integral part of its revenue and cannot be separated for the purpose of provision for bad debt. As discussed in the "Provision for Bad Debts" section in FY 2010-11, the Commission has not accepted MSEDCL's claim for including the ZLS revenue for estimating the provision for bad debts for FY 2011-12.

- 4.14.2 Therefore, the Commission is not considering any provision for bad debts for the revenue from sale of ZLS power. Accordingly, the Commission approves the provision for bad debts at 1.5% of the estimated revenue (excluding revenue from ZLS) for FY 2011-12 and FY 2012-13.

**Table 88: Provision for Bad debts for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Income billed (Revenue excluding ZLS)	37,814	37,814	50,395	50,409
Bad debts	572	567	756	756
Bad Debts Provision as % of income billed (excluding ZLS revenue)	1.51%	1.50%	1.50%	1.50%

#### 4.15 Contribution to Contingency Reserves for FY 2011-12 and FY 2012-13

- 4.15.1 MSEDCL has estimated the contribution to contingency reserve as 0.25% of the estimated opening balance of GFA of the respective years. The Commission accepts MSEDCL's proposal of 0.25%, but has, however, considered the approved opening balance of GFA for FY 2011-12 and FY 2012-13.
- 4.15.2 Accordingly, the Commission approves the following contribution to contingency reserve for FY 2011-12 and FY 2012-13.

**Table 89: Contribution to Contingency Reserve for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Contribution to contingency reserve	51.25	48.29	66.22	63.26

#### 4.16 Return on Equity (RoE)

- 4.16.1 MSEDCL has estimated that the equity portion of the capital expenditure during FY 2011-12 and FY 2012-13 to be Rs. 2,229 crore and Rs. 1000 crore respectively. Based on the approved funding pattern discussed in the interest expenses section, the equity portion of capitalisation has been considered as Rs. 1,629 crore for FY

2011-12 and Rs. 1,345 crore for FY 2012-13, which is the same as submitted by MSEDCL.

- 4.16.2 The return on equity approved for MSEDCL for FY 2011-12 and FY 2012-13 is given below.

**Table 90: Return on Equity for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Opening balance of regulatory equity	5,125	4,787	6,164	5,826
Equity Portion of Capitalisation (excluding grants and consumer contribution)	1,039	1,039	706	706
Regulatory Equity at the end of the year	6,164	5,826	6,870	6,531
Return on Regulatory Equity at beginning of the year	820	766	986	932
Return on Equity Portion of Capital Expenditure Capitalised	83	83	56	56
Total Return on Regulated Equity	903	849	1,043	989

#### 4.17 Income tax

- 4.17.1 MSEDCL has projected no expenses towards income tax for FY 2011-12 and FY 2012-13. The Commission therefore approves no expense towards income taxes for FY 2011-12 and FY 2012-13. However, the Commission will consider the actual amount paid towards income tax for FY 2011-12 and FY 2012-13 at the time of Truing up of the respective years, subject to prudence check.

**Table 91: Income tax for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Income tax	---	---	---	---

#### 4.18 Non-Tariff income

- 4.18.1 MSEDCL has projected the non-Tariff income to increase 5% per annum over the actual non-Tariff income for FY 2010-11 (excluding interest on other investments that have been kept the same for FY 2011-12). Therefore, MSEDCL has estimated the non-Tariff income for FY 2011-12 at Rs. 1,314 crore. The actual non-Tariff income for H1 (half the year) of FY 2011-12 was Rs. 618 crore, which works out to 47% of the estimated non-Tariff income for FY 2011-12 as estimated by

MSEDCL for FY 2011-12. Since, the estimate is in-line with the actual non-Tariff income; the Commission has considered a 5% increase in the non-Tariff income for FY 2011-12.

- 4.18.2 For FY 2012-13, the Commission has considered a rise of 5% over the approved non-Tariff income for FY 2011-12. The non-Tariff income approved for FY 2011-12 and FY 2012-13 is as shown below.

**Table 92: Non-Tariff income for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Non-Tariff income	1,314	1,314	1,379	1,379

#### 4.19 Income from wheeling charges

- 4.19.1 MSEDCL has estimated the income from wheeling charges to increase by 5% per annum over the actual income from wheeling charges in FY 2010-11. The Commission approves the same for the purpose of determination of ARR.

**Table 93: Income from wheeling charges for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Income from wheeling charges	16.78	16.78	17.62	17.62

#### 4.20 Revenue from Cross Subsidy Surcharge for FY 2012-13

- 4.20.1 The Commission vide the Order in Case No. 43 of 2010 dated 10 September, 2011, determined Cross Subsidy Surcharge (CSS) to be levied on Open Access consumers. MSEDCL has not projected any income from CSS for FY 2011-12 or FY 2012-13, though MSEDCL has proposed new CSS for the various categories.
- 4.20.2 The Commission identified this data gap and asked MSEDCL to submit its estimates on recovery of CSS for FY 2011-12 and FY 2012-13. MSEDCL only provided the estimates for FY 2011-12, amounting to Rs. 4.46 crore. MSEDCL submitted that most of the consumers availing Open Access were captive power users and hence did not have to pay any CSS.
- 4.20.3 For the purpose of determination of ARR, the Commission has considered MSEDCL's submission on the same. For FY 2012-13, the Commission has considered an amount to be twice that of the estimated amount in FY 2011-12,

since the CSS applicable in FY 2011-12 was for a period of 7 months only (September 2011 to March 2012).

**Table 94: Income from CSS**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Income from CSS	----	4.46	----	8.92

#### 4.21 Revenue from sale of power

4.21.1 MSEDCL has estimated that the revenue from sale of power in FY 2011-12 as Rs. 38,135 crore of which Rs. 321 crore is on account of revenue from sale of ZLS power. MSEDCL submitted that the revenue is based on actual revenue over 10 months from March 2011 to January 2012. For the purpose of determination of ARR of FY 2011-12, the Commission has considered the revenue as submitted as MSEDCL as it is based on 10 months of actual revenue.

4.21.2 For FY 2012-13, the Commission has estimated the revenue from existing Tariffs based on the fixed and energy charge approved in Case No. 111 of 2009, additional energy charge approved in Order dated 2 December, 2010 and additional energy charge approved in Order dated 31 October, 2011. Accordingly, the Commission has estimated MSEDCL's revenue in FY 2012-13 as Rs. 42,005 crore based on existing Tariffs and reduced quantum of sales as estimated by the Commission. The estimated revenue from sale of power at existing Tariffs for FY 2011-12 and FY 2012-13 is as given below:

**Table 95: Revenue from sale of power for FY 2011-12 and FY 2012-13**

(Rs. crore)

Particulars	FY 2011-12		FY 2012-13	
	MSEDCL	Approved	MSEDCL	Approved
Revenue from sale of power	37,814	37,814	43,127	42,005

#### 4.22 Approved ARR and Revenue Gap for FY 2011-12 and FY 2012-13

4.22.1 The approved Aggregate Revenue Requirement for FY 2011-12 and FY 2012-13 is summarised in the Table below.

**Table 96: Aggregate Revenue Requirement and Revenue gap for FY 2011-12 and FY 2012-13**

(Rs. crore)

Sr. No.	Particulars	FY 2011-12		FY 2012-13	
		MSEDCL	Approved	MSEDCL	Approved



Sr. No.	Particulars	FY 2011-12		FY 2012-13	
		MSEDCL	Approved	MSEDCL	Approved
1	Power Purchase Expenses	31,707	31,116	36,623	37,238
2	Operations and Maintenance Expenses	3,437	3,063	3,893	3,362
2.1	Employee Expenses	2,485	2,204	2,829	2,438
2.2	Administration & General Expenses	387	290	442	314
2.3	Repair & Maintenance Expenses	566	569	622	611
3	Depreciation, including advance against depreciation	1,014	1,014	1,309	1,309
4	Interest on Long-term Loan Capital	828	803	1,102	1,127
5	Interest on Working Capital, Consumer Security Deposits & Finance Charges	683	317	711	559
6	Provisions for Bad Debts	572	567	756	756
7	Other Expenses	10	9	11	9
8	Income Tax / wealth Tax	-	-	-	-
9	Transmission Charges paid to Transmission Licensee	2,199	2,200	2,199	3,105
10	Contribution to contingency reserves	51	48	66	63
11	Incentives/Discounts	150	150	158	157
<b>12</b>	<b>Total Revenue Expenditure</b>	<b>40,652</b>	<b>39,286</b>	<b>46,827</b>	<b>47,687</b>
13	Return on equity	903	849	1,043	989
<b>14</b>	<b>Aggregate Revenue Requirement</b>	<b>41,555</b>	<b>40,135</b>	<b>47,870</b>	<b>48,676</b>
15	Less: Non Tariff Income	(1,314)	(1,314)	(1,379)	(1,379)
16	Less: Income from wheeling charges	(17)	(17)	(18)	(18)
17	Less: Income from CSS	(4)	(4)	-	(9)
18	Add: RLC refund (non-PD consumers)	443	443	-	500

Sr. No.	Particulars	FY 2011-12		FY 2012-13	
		MSEDCL	Approved	MSEDCL	Approved
19	Add: RLC refund (PD consumers)	-	-	-	166
20	Add: ASC refund	-	-	-	-
21	Add: Net Prior Period Credit / Charges	-	-	-	-
22	Effect of sharing of gains/ (losses)	-	-	-	-
<b>23</b>	<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>40,663</b>	<b>39,243</b>	<b>46,474</b>	<b>47,937</b>
24	Revenue from Sale of Power at Existing Tariff with ZLS	38,135	38,135	43,127	42,005
25	Less: Revenue from ZLS Power	321	321	-	-
26	Net Revenue	37,814	37,814	43,127	42,005
<b>27</b>	<b>Revenue Gap</b>	<b>2,849</b>	<b>1,429</b>	<b>3,347</b>	<b>5,932</b>

4.22.2 Therefore, the Commission approves Rs. 1,429 crore as revenue gap for FY 2011-12 and Rs. 5,932 crore for FY 2012-13 on a standalone basis.

## 5. OTHER CLAIMS AND ORDERS IMPACTING THE REVENUE GAP OF MSEDCL

Apart from the revenue gap determined for FY 2010-11, FY 2011-12 and FY 2012-13, there are various other claims made by MSEDCL relating to previous Orders. Also, after MSEDCL filed its Petition on 24 February, 2012, the Commission has issued certain Orders which would impact the revenue gap of MSEDCL. This section elaborates the various claims and Orders which need to be considered for determination of the consolidated revenue gap.

### 5.1 Capital expenditure related expenses disallowed in Case No. 111 of 2009

- 5.1.1 MSEDCL, in its APR Petition for FY 2009-10 in Case No. 111 of 2009 had submitted that the total capitalisation for FY 2008-09 was Rs. 1,481 crore, while the Commission had approved Rs. 942 crore in the APR Order for FY 2008-09 dated 17 August, 2009 in Case No. 116 of 2008.
- 5.1.2 The Commission sought scheme-wise details of capitalisation claimed by MSEDCL and the funding for such capitalisation. However, MSEDCL could not submit the same. The Commission observed that with the schemes clubbed together, it was difficult to ascertain whether the schemes capitalised had been approved by the Commission. However, based on the information available with the Commission, the Commission had approved total capitalisation of Rs. 711.97 crore for FY 2008-09 in Case No. 111 of 2009, corresponding to total capitalisation of Rs 1481 crore claimed by MSEDCL.
- 5.1.3 The Commission also observed that most of schemes categorised by MSEDCL under Non-DPR schemes were in excess of Rs 10 crore, for which, DPRs had to be submitted, and prior approval of the Commission had to be obtained. Hence, the Commission had not considered capitalisation of schemes entailing capital outlay in excess of Rs 10 crore, for which no DPRs were submitted to the Commission for approval. MSEDCL in its Petition had submitted a total capitalisation of Rs. 1481 crore and has not segregated capitalisation into DPR schemes and Non-DPR schemes.
- 5.1.4 The Commission, in its Order for FY 2008-09 in Case No. 116 of 2008 ruled that:  
*“The Commission shall consider actual capitalisation of the DPR schemes during FY 2008-09 at the time of annual performance review for FY 2009-10, subject to prudence check and upon evaluation of actual cost-benefit derived in respect of DPR schemes vis-à-vis projected cost-benefit analysis presented at the time of granting in-principle approval for such DPR schemes”.*
- 5.1.5 However, at the time of APR of FY 2009-10, in Case No. 111 of 2009, MSEDCL had still not submitted the requisite cost-benefit analysis reports as required by the Commission. Hence, the Commission had considered 50% of approved capitalisation for DPR schemes and the total capitalisation on non-DPR schemes have been capped at 20% of that for approved DPR schemes during that year, as summarised below:

**Table 97: Capitalisation for FY 2008-09***(Rs. crore)*

Particulars	MSEDCL's submission (Actuals)	Approved by the Commission in Case No. 116 of 2008	Approved by the Commission in Case No. 111 of 2009
Capital Expenditure	1,762		
Capitalisation	1,481	942	427
<i>DPR schemes</i>			355
<i>Non-DPR schemes</i>			71

5.1.6 At present, MSEDCL submitted the required cost-benefit analysis reports. The Commission found the cost-benefit analysis satisfactory and through its Order dated 30 December, 2011, in Case. No. 100 of 2011 allowed the capitalisation for various schemes, subject to the findings of the study regarding the implemented schemes for which Administrative Staff College of India (ASCI), Hyderabad has been appointed by the Commission.

5.1.7 Since the cost-benefit analysis reports have been submitted and are satisfactory, the Commission is allowing the entire disallowed capitalisation on account of DPR and Non-DPR schemes in FY 2008-09. MSEDCL has submitted in its Petition that the impact of such additional capitalisation approved for FY 2008-09 will result into an amount of Rs. 237 crore as shown below:

**Table 98: Impact of disallowed capitalisation for FY 2008-09 as claimed by MSEDCL***(Rs. crore)*

Particulars	Actual as claimed by MSEDCL in Petition in Case No. 111 of 2009	Approved by the Commission in Case No. 111 of 2009	Difference between Actual amount and Approved
Depreciation, including AAD	466	408	58
Interest on Long-term Loan Capital	370	237	133
Return on equity	550	504	46
Total			<b>237</b>

5.1.8 The Commission has, however, recomputed the depreciation, interest on loan capital and return on equity for FY 2008-09, based on the approved closing balance of GFA, closing balance of loan and closing regulatory equity of FY 2007-08. For determining the amount of loan and equity addition during FY 2008-09, the Commission has considered the funding of capital expenditure during FY 2008-09 as approved in Case No. 111 of 2009. The funding pattern for capitalization has been considered the same as that of capital expenditure. However, the debt to equity ratio has been restricted at 70:30 (Debt – Rs. 619 crore, Equity – Rs. 265

crore) as provided for in the Tariff Regulations, 2005. The approved funding for capital expenditure and capitalization for FY 2008-09 is as shown below.

**Table 99: Approved funding pattern of capitalisation for FY 2008-09**

(Rs. crore)

Particulars	Capital Expenditure for FY 2008-09	Percentage contribution to total funding of capital expenditure	Approved funding pattern of Capitalisation for FY 2008-09
Total capital expenditure	1,761.77	100%	1,480.51
Consumer contribution	262.95	15%	220.97
Grants	446.27	25%	375.02
Debt	701.23	40%	619.16
Equity	351.32	20%	265.35

5.1.9 The depreciation for FY 2008-09 as estimated by MSEDCL is Rs. 466 crore. However, the Commission has considered the closing balance of GFA for FY 2007-08 and has computed the revised depreciation based on the average depreciation rate (%) of MSEDCL. The Commission has considered the entire addition to GFA as per the Audited Accounts of MSEDCL for FY 2008-09. The revised depreciation approved for FY 2008-09 and FY 2009-10 is as shown below:

**Table 100: Revised depreciation approved for FY 2008-09 and FY 2009-10**

(Rs. crore)

Particulars	As claimed by MSEDCL for FY 2008-09	Approved in Case No. 111 of 2009	Revised Approval for FY 2008-09	Approved in Case No. 100 of 2011 for FY 2009-10	Revised Approval for FY 2009-10
Opening GFA	11,806	10,831	10,831	11,256	12,464
Additions during the year	1,635	427	1,635	2,065	2,065
Retirements during the year	(2)	(2)	(2)	(25)	(25)
Closing GFA	13,439	11,256	12,464	13,296	14,504
Depreciation	466	408	430	465	511
Depreciation (as a % of Average GFA)	3.69%	3.70%	3.69%	3.79%	3.79%
Loan Repayment	409	408	409	465	511
Depreciation (including	466	408	430	465	511

Particulars	As claimed by MSEDCL for FY 2008-09	Approved in Case No. 111 of 2009	Revised Approval for FY 2008-09	Approved in Case No. 100 of 2011 for FY 2009-10	Revised Approval for FY 2009-10
AAD)					
Total additional amount approved			21.75		45.76

5.1.10 The interest on loan capital for FY 2008-09 as estimated by MSEDCL is Rs. 370 crore. However, the Commission has considered the approved closing balance of loans for FY 2007-08 and has computed the revised interest expense based on the actual interest rate (%) of MSEDCL. Since, the closing loan balance of FY 2008-09 has been revised, the interest expense for FY 2009-10 has also been revised. The revised interest on loan capital approved for FY 2008-09 and FY 2009-10 is as shown below:

**Table 101: Revised interest on loan capital approved for FY 2008-09 and FY 2009-10**

(Rs. crore)

Particulars	As claimed by MSEDCL for FY 2008-09	Approved in Case No. 111 of 2009	Revised Approval for FY 2008-09	Approved in Case No. 100 of 2011 for FY 2009-10	Revised Approval for FY 2009-10
Opening Balance of loans	3,631	2,484	2,484	2,254	2,695
Additions during the year	777	179	619	1,248	1,248
Repayments during the year	(409)	(408)	(409)	(465)	(511)
Closing Balance	4,025	2,254	2,695	3,037	3,431
Gross Interest Expense	406	249	274	275	318
Less: IDC	(36)	(10)	-	(36)	-
Net Interest Expense	370	238	274	238	318
Average Interest Rate (%)	10.60%	10.50%	10.60%	10.38%	10.38%
Additional amount approved			36.11		79.52

5.1.11 The return on equity for FY 2008-09 as estimated by MSEDCL is Rs. 550 crore. However, the Commission has considered the approved closing balance of regulatory equity for FY 2007-08 as the opening balance of regulatory equity for FY 2008-09. Since, the closing balance of regulatory equity for FY 2008-09 has been revised, the return on equity for FY 2009-10 has also been revised. The revised RoE approved for FY 2008-09 and FY 2009-10 is as shown below:

**Table 102: Revised return on equity approved for FY 2008-09 and FY 2009-10**

(Rs. crore)

Particulars	As claimed by MSEDCL for FY 2008-09	Approved in Case No. 111 of 2009	Revised Approval for FY 2008-09	Approved in Case No. 100 of 2011 for FY 2009-10	Revised Approval for FY 2009-10
Regulatory Equity at beginning of year	3,211	3,109	3,109	3,185	3,374
Equity Portion of Capitalisation (excluding grants and consumer contribution)	514	77	265	135	135
Regulatory Equity at the end of the year	3,726	3,185	3,374	3,320	3,509
Return on Regulatory Equity at beginning of the year	514	497	497	510	540
Return on Equity Portion of Capital expenditure in capitalized	26	6	21	11	11
Total Return on Regulatory Equity	540	504	519	520	551
Additional amount approved			15		30

5.1.12 The summary of the approved impact of additional capitalisation in FY 2008-09 is as shown below.

**Table 103: Summary of impact of additional capitalisation in FY 2008-09**

(Rs. crore)

Particulars	FY 2008-09	FY 2009-10	Total
Depreciation, including AAD	21.75	45.76	67.50
Interest on long-term loan capital	36.11	79.52	115.63
Return on equity	15	30	45.31
Total impact of additional capitalisation in FY 2008-09	72.96	155.49	228.45

## 5.2 Impact of Hon'ble ATE Judgement (Appeal No. 124 of 2010)

5.2.1 On 20 June, 2008, the Commission issued its Order for MSEDCL in the matter of Annual Performance Review for FY 2007-08 and Tariff determination for MSEDCL for FY 2008-09 in Case No.72 of 2007. MSEDCL filed a Petition (Case No. 42 of 2008) on 21 July, 2008 under Regulation 85 of the MERC (Conduct of

Business) Regulations, 2004, seeking a review of the aforesaid Order dated 20 June, 2008. MSEDCL, in the review Petition prayed that:

*“a. MSEDCL requests the Hon’ble Commission to review the double accounting of ASC revenue in its Order to mitigate the shortfall in its revenues...”*

- 5.2.2 MSEDCL submitted that since the Commission had set-off the estimated over-recovery of Rs. 427 crore and Rs. 768 crore in FY 2006-07 and FY 2007-08, respectively, against the non-costly power purchase by considering the same as revenue, the estimate by the Commission has resulted in effectively reducing MSEDCL’s aggregate revenue requirement and hence, revenue gap for FY 2008-09, by Rs. 1195 crore (Rs. 427 crore + Rs. 768 crore).
- 5.2.3 The Commission accepted MSEDCL’s contention of double counting of ASC revenue for FY 2006-07 and allowed the amount of Rs. 427 crore to be recovered through Tariffs in the 4 months from December, 2008 to March, 2009. The Commission however, did not accept MSEDCL’s contention on double-counting of ASC revenue from Rs. 768 crore for FY 2007-08 in the review Order.
- 5.2.4 On 17 August, 2009, the Commission issued its Order in the Case No. 116 of 2008, on MSEDCL’s Petition for Truing up for FY 2007-08, Annual Performance Review for FY 2008-09 and Tariff Determination for FY 2009-10. In the said Order, the Commission estimated a surplus of Rs. 214 crore from FY 2006-07 and considered this surplus when carrying out the provisional True-Up for FY 2008-09.
- 5.2.5 On 12 September, 2010, the Commission issued its Order in the Case No. 111 of 2009, on MSEDCL’s Petition for Truing up for FY 2008-09, Annual Performance Review for FY 2009-10 and Aggregate Revenue Requirement and Tariff determination for FY 2010-11.
- 5.2.6 MSEDCL filed a review Petition on the Order in Case. No. 111 of 2009 and contended that the Commission had incorrectly considered a surplus for Rs. 214 crore for FY 2006-07 while determining the Aggregate Revenue Requirement & Tariff for FY 2010-11. The Commission, in its Order dated 2 December, 2010 in Case. No. 69 of 2010, observed that the consolidated gap for FY 2009-10 was computed correctly and there was no error apparent in the computations while considering a surplus of Rs. 214 crore for FY 2006-07.
- 5.2.7 MSEDCL filed an appeal (Appeal No. 124 of 2010) against the Commission’s Order dated 17 August, 2009 in Case No. 116 of 2008 in the matter of True up for the FY 2007-08, Annual Performance Review for 2008-09 and determination of ARR and Tariff for the FY 2009-10.
- 5.2.8 MSEDCL, in its appeal to the Hon’ble ATE, claimed that the Commission has erroneously considered an amount of Rs. 214 crore to be surplus in FY 2006-07 in the provisional Truing up of FY 2008-09. According to MSEDCL’s contention in the appeal, the Commission did not consider its own Order dated 10 December, 2008 passed in Case No. 42 of 2008 wherein the Commission admitted that an error due to double counting of ASC revenue for FY 2006-07 occurred in its earlier order dated 20 June, 2008 while determining the revenue gap for the FY 2008-09.
- 5.2.9 MSEDCL claimed that in the order dated 10 December, 2008 the Commission categorically stated that due to double counting error the revenue gap for FY 2008-09 as estimated in the order dated 10 December, 2008 would have been higher by Rs. 427 crore which inter alia means that there could be no surplus of Rs. 214 crore



as estimated in the Order dated 20 June, 2008. On the contrary there would be a revenue gap of Rs.213 crore for the FY 2006-07.

- 5.2.10 The Hon'ble ATE passed the Judgment on 3 January, 2012 in the matter of Appeal No.124 of 2010. In the Judgement, the Hon'ble ATE observed that:

*“22. In the result, the appeal succeeds in part on first two points. We partly allow the appeal to the extent indicated in the body of the judgment and direct the Commission to have the wrongs corrected on the following two points:*

*The Respondent No. 1 shall pass an order relating to surplus of Rs.214 crore in the provisional True up for the FY 2008-09 in the light of this decision...”*

- 5.2.11 Therefore, according to the submission of MSEDCL and in view of the Judgement of the Hon'ble ATE, the Commission approves an amount of Rs. 427 crore to be recovered.

**Table 104: Additional impact of Hon'ble ATE Order**

(Rs. crore)

Particulars	MSEDCL submission	Approved by the Commission
Additional impact of Hon'ble ATE Order	427	427

### 5.3 Unrecovered gap approved in Case No. 100 of 2011

- 5.3.1 The Commission had approved a revenue gap of Rs. 405 crore in Order in Case No. 100 of 2011 dated 30 December, 2011, which was yet to be recovered through the Tariff. The following is the summary of the revenue gap approved in Case No. 100 of 2011.

**Table 105: Gap approved in Case No. 100 of 2011**

(Rs. crore)

Sr. No...	Particulars	Approved by the Commission
1	Final True up requirement for FY 2009-10	945
2	Provisional True up requirement for FY 2010-11	2,237
3	Additional impact of Hon'ble ATE Judgement	487
3	<b>Total Revenue Gap</b>	<b>3,670</b>
4	Less: Approved Revenue in Order dated 31 October, 2011	(3,265)
5	<b>Net Revenue Gap</b>	<b>405</b>

- 5.3.2 Therefore, the Commission has considered an amount of Rs. 405 crore in this regard.

**Table 106: Impact of Order in Case. No. 100 of 2011**

(Rs. crore)

Particulars	MSEDCL's submission	Considered by the Commission
Gap recognised in Case. No. 100 of 2011	405	405

#### 5.4 Approved gap for MSPGCL and Transmission

5.4.1 MSEDCL has claimed Rs. 610 crore due to the impact of the Order in Case. No. 107 of 2011 with regard to MSPGCL's Petition for approval of Truing up for FY 2009-10, and Annual Performance Review for FY 2010-11. However, on June 18, 2012, the Commission issued its Order in Case No. 6 of 2012 with regard to MSPGCL's Petition for final True up for FY 2010-11, approval of Aggregate Revenue Requirement and Tariff for FY 2011-12 and FY 2012-13. In the Order in Case. No. 6 of 2012, the Commission has determined the Tariff for MSPGCL for FY 2011-12 and the same has been considered while determining the power purchase cost of MSEDCL from MSPGCL stations in FY 2011-12.

5.4.2 For FY 2012-13, the Commission has determined the Tariff for MSPGCL stations after taking into consideration the determined gap of FY 2010-11. The Order came into force from 1 June, 2012. Therefore in the present Order, the Commission for FY 2012-13 has considered the Tariffs as determined in Case No. 6 of 2012. Since, the Commission has already considered the impact of the gap in the MSPGCL's power purchase expenses for FY 2011-12 and FY 2012-13; the Commission is not approving any separate gap for the same.

**Table 107: Approved gap for MSPGCL**

(Rs. crore)

Particulars	MSEDCL submission	Approved by the Commission
Approved Gap of MSPGCL	610	Considered in power purchase expenses for FY 2011-12 and FY 2012-13

5.4.3 MSEDCL has claimed Rs. 230 crore due to the impact of the Order in Case. No. 102 of 2011 with regard to MSETCL's Petition for approval of Truing up for FY 2009-10, and Annual Performance Review for FY 2010-11. However, on 18 May, 2012, the Commission issued its Order in Case No. 169 of 2011 with regard to MSETCL's Petition for Final True up for FY 2010-11, approval of Aggregate Revenue Requirement and Tariff for FY 2011-12 and FY 2012-13. Further, on 21 May, 2012, the Commission issued its Order in the matter of "*Suo motu Determination of Transmission Tariff for Intra-State Transmission System (InSTS) for FY 2012-13 of the second MYT Control Period*". The Commission has determined the transmission charges to be payable by each licensee for FY 2012-13 in the above Order. The Order came into force from 1 June, 2012.

5.4.4 The Commission has considered the impact of this Order in determining the transmission charges payable by MSEDCL for FY 2012-13. Since, the Commission has already considered the impact of the gap in the transmission charges for FY 2012-13, the Commission is not approving any separate gap for the same.

**Table 108: Approved gap for MSETCL**

(Rs. crore)

Particulars	MSEDCL submission	Approved by the Commission
Approved Gap of MSETCL	230	Considered in transmission charges for FY 2012-13

**5.5 Impact of Order in Case No. 21 of 2012**

5.5.1 MSEDCL filed a Petition seeking review of the Order dated 30 December, 2011 in Case No. 100 of 2011 in respect of MSEDCL's Annual Performance Review (APR) for FY 2010-11 and Final True up for FY 2009-10. Out of the three issues raised by MSEDCL, one of them was on account of additional sales considered by the Commission while Truing up for FY 2009-10. The Commission issued an Order on the said Petition on 15 June, 2012. The Commission in the said Order noted that:

*"12. The Commission has observed that in the above mentioned Order, in addition to the sharing of gains and losses (as mentioned above), there was a further deduction of Rs 750 crore from the Gross ARR. This deduction was on account of provisional additional revenue on account of reduced distribution losses, as estimated in Commission's Order in Case No. 116 of 2008 dated August 17, 2009 and later on provisionally approved in Case No. 111 of 2009 dated 12 September, 2010.*

*13. The Commission therefore affirms, that since the efficiency losses, based on actual level of distribution losses, has already been considered, the reduction in ARR to the extent of this provisional amount of Rs 750 crore need not be considered. The actual revenue gap for FY 2009-10, thus needs to be revised upwards to the extent of Rs 750 crore.*

*14. Further, the Order dated 30 December, 2011 was limited to determination of actual revenue gap for FY 2009-10, and annual performance review of FY 2010-11 and revenue gap arrived from this Truing up process was to be recovered through the Tariffs of FY 2012-13. The Commission also notes that with this review Petition, the process laid out for recovery of revenue gap has not changed. Hence, the revision of the revenue gap for FY 2009-10, therefore does not warrant any interim relief. The Commission shall consider an additional amount of Rs 750 crore to re-compute the truing-up gap for FY 2009-10 over and above the gap approved in Order dated 30 December, 2011, based on above findings, in the next Tariff determination exercise."*

5.5.2 In view of the said Order, the Commission has considered an additional amount of Rs. 750 crore while determining the cumulative revenue gap.

**Table 109: Impact of Case No. 21 of 2012**

(Rs. crore)

Particulars	MSEDCL submission	Considered by the Commission
Impact of Case No. 21 of 2012	---	750

## 5.6 Impact of Order in Case No. 43 of 2012

5.6.1 MSEDCL filed a Petition seeking review of the Commission's Order dated 30 April, 2012 in Case No. 12 of 2012 for the recovery of accumulated amount of FAC. The Commission issued its Order on 15 June, 2012. In its Order, the Commission mentioned the following:

*“The Commission also observes that the large amount of unrecovered FAC is causing very high burden on the distribution licensee, and consequentially on the generating company. Tariff determination process for True up for FY 2010-11, ARR for FY 2011-12 & FY 2012-13 and Tariff determination for FY 2012-13 for the Petitioner is taking much longer time than envisaged and meanwhile, the Petitioner is burdened with excessive charges towards meeting its power procurement expenditures and carrying costs thereof. The Commission is of the view that there are sufficient reasons to grant the present review of the impugned Order*

*Therefore, the Commission allows the Petitioner to recover an accumulated amount of around Rs. 1483 crore from its consumers through monthly energy bills in six equal installments, from June 2012 to November 2012. The additional amount as above will be recovered proportionate to the Tariff charged to the consumers as per their respective category and slab in conformity with the principles specified in Regulation 82.10 of Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) (Amendment) Regulations, 2011.”*

5.6.2 Since the Commission has already approved a recovery of Rs. 1,483 crore from consumers as a separate charge, the same has been deducted by the Commission when arriving at the final revenue gap.

**Table 110: Impact of Case No. 43 of 2012**

(Rs. crore)

Particulars	MSEDCL submission	Considered by the Commission
Impact of Case No. 21 of 2012	---	(1,483)

5.6.3 The Commission clarifies that MSEDCL needs to charge this amount in consumer bills up to November 2012, as indicated in the Order in Case No. 43 of 2012.

## 5.7 Consolidated revenue gap for MSEDCL to be recovered through Tariff

5.7.1 The consolidated revenue gap for the 3 years, FY 2010-11, FY 2011-12 and FY 2012-13, and the impact of other claims and Orders issued by the Commission is as shown below:

**Table 111: Consolidated revenue gap for MSEDCL to be recovered through Tariff***(Rs. crore)*

<b>Sr. No.</b>	<b>Particulars</b>	<b>As submitted by MSEDCL</b>	<b>Approved by the Commission</b>
1	Gap of FY 2010-11	(491)	(767)
2	Gap of FY 2011-12	2,853	1,429
3	Gap of FY 2012-13	3,351	5,932
4	Capitalisation disallowed by the Commission for FY 2008-09	237	228
5	Gap approved to be uncovered for FY 2010-11 (as approved in Case 100 of 2011)	405	405
6	Hon'ble ATE Judgement (124 of 2010)	427	427
7	Approved Gap of MSPGCL	610	Considered in Sr. No.. 2, 3
8	Approved Gap of MSETCL	230	Considered in Sr. No.. 3
9	Add: Impact of Case No. 21 of 2012 (Review of Order in Case. No. 100 of 2011)	NA	750
10	Less: Impact of Case No. 43 of 2012 (Order on FAC)	NA	(1,483)
11	Total Gap to be recovered from Tariff	7,623	6,921
	Increase required in existing Tariff	17.68%	16.48%*

*\*Existing Tariff excluding the additional charge of Rs. 1,483 crore which is being recovered by MSEDCL separately*

## **6. SCHEDULE OF CHARGES**

### **6.1 Background**

6.1.1 MSEDCL has submitted that it recovers various miscellaneous and general charges from its consumers for various services it provides for supplying electricity. MSEDCL stated that it maintains equipment on rental for consumers' exclusive use apart from providing various other services to the consumers, cost of which is intended to be recovered from these miscellaneous charges, which otherwise would have been borne by the consumer. The income from these charges form a part of the non-Tariff income of MSEDCL.

6.1.2 MSEDCL quoted the provisions of Section 45 of EA 2003 and MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 authorising MSEDCL to recover such charges from consumers and clarified that the charges are levied as per the schedule of charges approved by the Commission vide Order dated September 8, 2006 in Case No. 70 of 2005. MSEDCL further added that since the year 2006, various parameters have changed. The cost of material as well as other administrative and labour components of charges has increased over such period. This has necessitated the need for revision of the schedule of charges for FY 2011-12 and onwards.

6.1.3 In its Petition, MSEDCL has prayed to revise the schedule of charges and proposed a revised schedule for the Commission's approval. In the following paragraphs the Commission has analysed the proposal and determined the Schedule of Charges for MSEDCL.

### **6.2 Service connection charges proposed by MSEDCL**

6.2.1 MSEDCL considered a length of 30 metres for service connection wires as per the provision of the Indian Electricity Rules, 1956. MSEDCL submitted that it is the standard practice in India and its own network is also designed on the same basis. Therefore, from standardization point of view, it has considered 30 metre length for the service wires. It also reported that the Commission has given in-principle approval to some of the DPR schemes having estimate of service connection with service wire length of 30 meters.

6.2.2 MSEDCL submitted that it has used cost data for FY 2010-11 as per the material schedule rates of its Central Purchase Agency (CPA). Actual labour cost has been calculated from basic pay and working hours of the staff and labour. MSEDCL considered 5% and 1.5% of the total material cost as transportation cost and cost for the tools and plants respectively. MSEDCL proposed to keep all other charges, such as supervision charges, variable charges, etc, at the present level.

### **6.3 Service connection charges for new overhead connections**

6.3.1 The service connection charges for new overhead connections as proposed by MSEDCL are reproduced below.

#### **LT supply**

##### **Single phase:**

**Table 112: Service connection charges for overhead connection (LT 1 Ph) for load up to 0.5 kW as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost in Rs.
W.P. Wire 2.5mm <sup>2</sup>	M	30	5.38	161.40
Meter Board	No	1	40.00	40.00
MCB 20 A with Enclosure	No	1	123.32	123.32
G.I. Wire 10SWG	Kg	2	55.40	110.80
GI Pipe 20 mm	M	3	52.00	156.00
Reel Insulator 20 mm	No	20	2.00	40.00
GI Bend 20 mm	No	3	13.20	39.60
GI Flexible pipe 20 mm	No	2	10.00	20.00
GI coupling 20 mm	No	3	5.50	16.50
Sundries NB, Screws, Washers, etc.	No	1	150.00	150.00
Total				857.62
Approx. Labour Charges				220.40
Transportation Charges (5%)				42.90
Tools & plants (1.5%)				12.90
Grand Total				1134
			Proposed charges	1000

**Table 113: Service connection charges for overhead connection (LT 1 Ph) for load above 0.5 kW and up to 10 kW as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost in Rs.
W.P. Wire 10 mm <sup>2</sup>	M	30	16.20	486.00
Meter Board	No	1	40.00	40.00
Kitkat Fuse 32A, 250V	No	1	123.32	123.32
G.I. Wire 10 SWG	Kg	2	55.40	110.80
GI Pipe 30 mm	M	3	95.00	285.00
Reel Insulator 30 mm	No	20	2.00	40.00
GI Bend 30 mm	No	3	45.00	135.00
GI Flexible pipe 30 mm	No	2	25.00	50.00
GI coupling 30 mm	No	3	30.00	90.00
Sundries NB, Screws, Washers, etc.	No	1	200.00	200.00
Total				1560.12
Approx. Labour Charges				440.90

Material	Unit	Quantity	Rate	Cost in Rs.
Transportation Charges (5%)				78.00
Tools & plants (1.5%)				23.40
Grand Total				2102
	Proposed charges			2000

Note: 1) Material Schedule rates of CPA cost data for FY 2010-11

2) Labour charges are calculated on average actual employee wages

### Three phase:

**Table 114: Service connection charges for overhead connection (LT 3 Ph) for motive power (< 21 HP) or other (< 16 kW) as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost (in Rs.)
W.P. Wire 16 mm <sup>2</sup>	M	30	63.67	1910.10
Meter Board	No	1	70.00	70.00
Kitkat Fuse 63A, 650V	No	3	309.74	929.22
G.I. Wire 8 SWG	Kg	2	53.84	107.68
GI Pipe 25 mm	M	3	65.00	195.00
Reel Insulator 25 mm	No	20	2.00	40.00
GI Bend 25 mm	No	3	13.20	39.60
GI Flexible pipe 25 mm	No	2	59.00	118.00
GI coupling 25mm	No	3	5.50	16.50
Sundries NB, Screws, Washers etc.	No	1	200.00	200.00
Total				3626.10
Approx. Labour Charges				440.90
Transportation Charges (5%)				181.30
Tools & Plants (1.5%)				54.40
Grand Total				4303
	Proposed charges			4000

**Table 115: Service connection charges for overhead connection (LT 3 Ph) for motive power (>21 HP but <107 HP) or other (>50 kW but <80 kW) as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost in Rs.
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Material	Unit	Quantity	Rate	Cost in Rs.
L.T. PVC Armoured cable 4 core 70 sq.mm	m	30	242.98	7,289.40
Meter Board	No	1	70.00	70.00
Kitkat Fuse 200A, 650V	No	3	544.84	1,634.52
G.I. Wire 8SWG	kg	3	53.84	161.52
Sundries NB, Screws, Washers, Saddle, etc.	No	1	500.00	500.00
Total				9655.44
Approx. Labour Charges				633.60
Transportation Charges (5%)				482.80
Tools & Plants (1.5%)				144.80
Grand Total				10916.7
	Proposed charges			10000

**Table 116: Service connection charges for overhead (LT 3 Ph) for motive power (> 107 HP but < 201 HP) or other (> 80 kW but <150 kW) as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost
L.T. PVC Armoured cable 4 core 150sq.mm	m	30	354.70	10641.00
Meter Board	No	1	70.00	70.00
Kitkat Fuse 200A, 650V	No	3	544.84	1634.52
Sundries NB, Screws, Washers, saddle, etc.	No	1	2000.00	2000.00
Total				14345.52
Approx. Labour Charges				2065.90
Transportation Charges (5%)				717.30
Tools & Plants (1.5%)				215.20
Grand Total				17343.9
	Proposed Charges			17000

Note: 1) Material schedule rates of CPA cost data for FY 2010-11

2) Labour charges are calculated on average actual employee wages

### **HT supply**

**Table 117: Service connection charges for overhead connection (HT) up to 500 kVA as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost
XLPE Cable 11 kV 3C 35 sq. mm.	m	30	287.70	8,631.00
Heat shrinkable kit	No	2	4,200.00	8,400.00
Cable Trays 2.5* 6"	No	12	200.00	2,400.00
Sundries	No	1	1,000.00	1000.00
Total				20431.00
Approx. Labour Charges				2,909.00
Transportation Charges (5%)				1022.00
Tools & Plants (1.5%)				306.00
Grand Total				24668
Proposed Charges				24000

Note: 1) Material schedule rates of CPA cost data for year 2010-11

2) Labour charges are calculated on average actual employee wages

#### 6.4 Service connection charges for new underground connections

6.4.1 The service connection charges for new underground connections as proposed by MSEDCL are reproduced below.

##### **LT supply**

##### **Single phase**

**Table 118: Service connection charges for underground connection (LT 1 Ph) for load up to 5 kW as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost (Rs)
L.T. 2 Core Cable 2.5 sq mm Armoured	m	30	69.25	2078
Meter Board	No	1	40	40
MCCB 32A with enclosure	No	1	123.32	123
Misc. for U/G Cable	LS	1	1000	990
Total				3231
Approx. Labour Charges				882
Transportation Charges (5%)				153
Tools & Plants (1.5%)				56

Material	Unit	Quantity	Rate	Cost (Rs)
Grand Total				4322
	Proposed Charges			4000

**Table 119: Service connection charges for underground connection (LT 1 Ph) for loads above 5 kW and up to 10 kW as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost (Rs.)
L.T. 2 Core Cable 10sqmm Armoured	m	30	42.85	1285.5
Meter Board	No	1	70	70.0
Kitkat Fuse 63A, 650V	No	3	309.70	929.1
Misc. for U/G Cable	LS	1	4000	4000
Total				6285
Approx. Labour Charges				1653
Transportation Charges (5%)				153
Tools & Plants (1.5%)				56
Grand Total				8147
	Proposed Charges			8000

Note: 1) Material schedule rates of CPA cost data for year 2010-11

2) Labour charges are calculated on average actual employee wages

### Three phase

**Table 120: Service connection charges for underground connection (LT 3 Ph) motive power (< 27 HP) or other (<20 kW) as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost
L.T. XLPE Armoured cable 4core 16sq.mm.	m	30	63.7	1,909.8
Meter Board	No	1	70.0	70
Kitkat Fuse 63A, 650V	No	3	309.7	929
R.C.C. Pipe 150 mm 2 M	No	10	479.0	4,790
Misc. for U/G Cable	LS	1	4,000.0	4,000
Total				11,699
Approx. Labour Charges				1,653
Transportation Charges (5%)				1,200

Material	Unit	Quantity	Rate	Cost
Tools & plants (1.5%)				184
Grand Total				14,735.8
	Proposed Charges			14,000

**Table 121: Service connection charges for underground (LT 3 Ph) motive power (>27 HP but <67 HP) or other (>20 kW but <50 kW) as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost
L.T. XLPE Armoured cable 4 core 70 sq.mm.	m	30	361.87	10,856.1
Meter Board	No	1	70.00	70.0
Kitkat Fuse 200A, 650V	No	3	309.70	929.1
R.C.C. Pipe 150 mm 2 M	No	10	479.00	4,790.0
Misc. for U/G Cable	LS	1	4,000.00	4,000.0
Total				20,645.2
Approx. Labour Charges				1,653
Transportation Charges (5%)				1,200
Tools & plants (1.5%)				184
Grand Total				23,682
Proposed	Proposed Charges			23,000

**Table 122: Service connection charges for underground (LT 3 Ph) motive power (> 67 HP but <134 HP) or other (> 50 kW but <100 kW) as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost
L.T. XLPE Armoured cable 4 core 185 sq.mm.	m	30	788.4	23,652.0
Meter Board	No	1	70.0	70.0
MCCB	No	1	5,500.0	5,500.0
R.C.C. Pipe 150 mm 2 M	No	10	630.0	6,300.0
Misc. for U/G Cable	LS	1	8,000.0	8,000.0
Total				43,522.0
Approx. Labour Charges				3,305.5

Material	Unit	Quantity	Rate	Cost
Transportation Charges (5%)				1,200.0
Tools & plants (1.5%)				184.0
Grand Total				48,211.5
	Proposed Charges			48,000

**Table 123: Service connection charges for underground (LT 3 Ph) motive power (> 134 HP but <201 HP) or other (> 100 kW but < 150 kW) as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost
L.T. XLPE Armoured cable 4 core 300 sq.mm.	m	30	1,258.5	37,753.5
Meter Board	No	1	70.0	70.0
MCCB	No	1	15,830.0	15,830.0
R.C.C. Pipe 150 mm 2 M	No	10	630.0	6,300.0
Misc. for U/G Cable	LS	1	8,000.0	8,000.0
Total				67,953.5
Approx. Labour Charges				3,305.5
Transportation Charges (5%)				1,200.0
Tools & plants (1.5%)				184.0
Grand Total				72,643
	Proposed Charges			72,000

Note: 1) Material schedule rates of CPA cost data for year 2010-11

2) Labour charges are calculated on average actual employee wages

### **HT Supply**

6.4.2 The Commission noticed that MSEDCL did not provide the item wise cost break up for its proposed service connection charges for new underground HT connections. MSEDCL submitted details as below.

**Table 124: Service connection charges for underground HT supply up to 500 kVA as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost (Rs.)
RSJ 152x152, 13 m long	No	2	20374.72	40749.43
M.S. Flats (50 X 10mm)	Kg	15	34.13	511.92

Material	Unit	Quantity	Rate	Cost (Rs.)
MS Channel 100x50x6 mm	Kg	175	37.92	6636.00
M.S. Channel 75x40x6 mm	Kg	85	37.92	3223.20
MS angle 50x50x6 mm	Kg	65	37.92	2464.80
Pin Insulator 11 kV	No	3	40.72	122.16
H.T. Stay Set	No	2	515.86	1031.72
Stay Wire 7/8	Kg	25	49.21	1230.25
Earthing Sets H.T	No	3	285.21	855.64
G.I. Wire 8 SWG/ 6 SWG	Kg	9	53.84	484.54
G.I. Barbed Wire 'A' type.	Kg	7	54.60	382.19
Danger Board in yard.	No	2	44.00	88.00
Red Oxide Paint for 2 coats	Ltr	6	51.00	306.00
Aluminium Paint for 1 coat	Ltr	4	88.00	352.00
Black Bituminus Paint	Ltr	2	41.00	82.00
Concreting ratio 1:4:8	Cmt	2	3135.00	6270.00
Sundries (Crimping of cable jumpers, minor matching washers, Road Cutting Charges & misc. items)	L.S.	1	42000.00	42000.00
XLPE Cable 11 kV, 3 C / 95 mm sq.	Rmt	60	484.99	29099.40
R.C.C. Pipe 150 mm <sup>2</sup> M	No	15	479.00	7185.00
RCC Tiles (0.6 x 0.5) Mtrs.	No	30	86.00	2580.00
11 kV Outdoor termination joint kit for 3 C X 95 mm <sup>2</sup>	No	2	4200.00	8400.00
Sand	Cmt	15	191.40	2871.00
Copper Strip (25 X 6 mm) for earthing of cubical, meter & cable	Kg	15	450.00	6750.00
HT Earthing set (For cubical )	Set	9	515.86	4642.74
Bentonite clay	Kg	500	4.00	2000.00
11 kV Lightning Arrestor	Set	1	9069.40	9069.40
Cost of material				179387.39
Approx. Labour Charges				25270.57
Transportation Charges (5%)				8969.37
Tools & Plants (1.50%)				2690.81

Material	Unit	Quantity	Rate	Cost (Rs.)
Grand Total				216318.14
	Proposed Charges			200000

**Table 125: Service connection charges for underground HT supply above 500 kVA as proposed by MSEDCL**

Material	Unit	Quantity	Rate	Cost (Rs.)
RSJ 152x152, 13 m long	No	2	20374.72	40749.43
M.S. Flats(50 X 10mm)	kg	15	34.13	511.92
MS Channel 100x50x6 mm	kg	175	37.92	6636.00
M.S. Channel 75x40x6 mm	kg	85	37.92	3223.20
MS angle 50x50x6 mm	kg	65	37.92	2464.80
Pin Insulator 11 kV	No	3	40.72	122.16
H.T. Stay Set	No	2	515.86	1031.72
Stay Wire 7/8	kg	25	49.21	1230.25
Earthing Sets H.T	No	3	285.21	855.64
G.I. Wire 8 SWG/ 6 SWG	kg	9	53.84	484.54
G.I. Barbed Wire `A' type.	kg	7	54.60	382.19
Danger Board in yard.	No	2	44.00	88.00
Red Oxide Paint for 2 coats	Ltr	6	51.00	306.00
Aluminium Paint for 1 coat	Ltr	4	88.00	352.00
Black Bituminous Paint	Ltr	2	41.00	82.00
Concreting ratio 1:4:8	Cmt	2	3135.00	6270.00
Sundries (Crimping of cable jumpers, minor matcing washers, Road Cutting Charges & misc. items)	L.S.	1	42000.00	42000.00
XLPE Cable 11 kV, 3 C / 185 mm sq.	Rmt	60	766.37	45982.20
R.C.C. Pipe 150 mm <sup>2</sup> M	No	15	479.00	7185.00
RCC Tiles (0.6 x 0.5) Mtrs.	No	30	86.00	2580.00
11 kV Outdoor termination joint kit for 3 C X 185 mm <sup>2</sup>	No	2	4200.00	8400.00
Sand	Cmt	15	191.40	2871.00
Copper Strip (25 X 6 mm) for earthing	kg	15	450.00	6750.00

Material	Unit	Quantity	Rate	Cost (Rs.)
of cubical, meter & cable.				
HT Earthing set (For cubical )	Set	9	515.86	4642.74
Bentonite clay	kg	500	4.00	2000.00
Cost of material				187200.79
Approx. Labour Charges				39133.37
Transportation Charges (5%)				0.00
Tools & Plants (1.5%)				0.00
Grand Total				226334.16
	Proposed Charges			225000

## 6.5 Commission's analysis and ruling

6.5.1 With regard to service connection charges proposed by MSEDCL for new underground LT single phase and three phase connections, the Commission noticed errors in computation of transportation charges and tools & plants charges. In this context, MSEDCL admitted typographical mistakes in its computations and submitted the revised computations. The Commission has considered the revised service connection charges submitted by MSEDCL. The Commission has considered the revised service connection charges submitted by MSEDCL.

6.5.2 Service connection charges were estimated by MSEDCL considering average length of 30 metres for the service wires citing the provision in IE Rules, 1956. However, the Commission noticed that at the time of the proceedings of Order in Case No. 70 of 2005, there were some objections raised by various consumer representatives in the context of the length of service wire. In response, MSEDCL had indicated its agreement to consider 20 metres as average length of service wires and it had voluntarily revised the schedule of charges by considering the length of service wires at 20 metres. The relevant portion of the said order is reproduced herein under.

*“MSEDCL has also indicated their agreement to consider 20 metres as average normative length in place of the average normative length of 30 metres of the service connection. The revised schedule submitted is based on 20 metres as the average normative length & revised CPA rates.”*

6.5.3 With regard to MSEDCL's citation that the Commission has given in principle approval to a DPR scheme having estimate of service connection with 30 meter long wire, the Commission is of the view that the in principle approval was granted considering the specific requirements of the proposed scheme and provision of it cannot be generally applied for all new service connections. On being asked about its justification, MSEDCL repeated its contention as submitted above without any additional justification for service wire length 30 meters.

6.5.4 Considering all the facts above, the Commission is of the view that the matter of considering average normative length of the service connection was settled in the



- Order in Case No. 70 of 2005. No justification has been provided by MSEDCL for changing the wire length at present except that it has been mentioned in the IE Rules, 1956. These rules are not new and have been in vogue since the time of its enactment in 1956. So, the same was considered by MSEDCL during the proceedings of Case No. 70 of 2005. The Commission finds no merit in MSEDCL's proposition of changing the consideration of the length of the service wire from 20 metres to 30 metres. The Commission has estimated the service connection charges on the basis of 20 metres as the average length.
- 6.5.5 The Commission observed that for underground connection, the rate of L.T. 2 core 2.5 square mm armoured cable was higher than 2 core 10 square mm armoured cable and 4 core 16 square mm cable armoured cable. In this context, MSEDCL replied that as a general practice 2 core 2.5 square mm armoured Copper cable is used for releasing the underground connections up to 0.5 kW. As the cost of Copper is more than that of Aluminum, the rate of the cable is moderately higher than that of 2 core 10 square mm and 4 core 16 square mm armoured cable.
- 6.5.6 The Commission verified the proposed rates with the rates of LOI submitted by MSEDCL as a part of CPA data. However, it was noticed that the LOI submitted by MSEDCL provided the per unit rates only for 5 material items. Therefore, the Commission asked MSEDCL to submit the CPA rates for all of the material items as proposed in service connection charges. MSEDCL later resubmitted the CPA data, but still it contained rates for only 56 no. of items out of around 75 items.
- 6.5.7 In the absence of CPA information on costs for few of the material items, the Commission could not compare the proposed cost of those items with the CPA data. Therefore, to arrive at reasonable rates, the Commission relied upon the Wholesale Price Index (WPI) published by the Office of the Economic Advisor (OEA), Ministry of Commerce and Industry for items where CPA data was not provided by MSEDCL. For items where CPA data was submitted by MSEDCL, the Commission has relied on the same. Accordingly, the Commission derived the material cost for overhead and underground service connection charges.
- 6.5.8 In the context of labour charges, the Commission asked MSEDCL to submit the reason for use of actual labour charges compared to the labour charges considered earlier as 10 % of the material cost. MSEDCL submitted that to have a realistic and more accurate figure, the actual normative labour charges and actual normative working hours were considered.
- 6.5.9 On being asked, MSEDCL submitted the working details for its proposed labour charges. However, in view of the Commission the average basic pay for its employees considered by MSEDCL appeared to be on the higher side. Also, the numbers of people and working hours considered by MSEDCL to release new connections were also appeared to be higher for new release of new connections with higher loads. In view of the above, the Commission relied on the principle already adopted at the time of determination of schedule of charges in the previous Order and considered the labour cost as 10% of the material cost.
- 6.5.10 For estimating other costs like transportation cost, and cost of tools and plants, the Commission considered them at 5% and 1.5% of total material costs in line with the Commission's approach adopted in Order in Case No. 70 of 2005.

6.5.11 With the above considerations, the Commission approves service connection charges for new overhead and underground connections as summarised in the following table:

**Table 126: Service connection charges for new overhead connections as approved by the Commission**

Sr. No.	Category	As per Case 70 of 2005		Proposed by MSEDCL		Approved by the Commission	
		Existing SOC (Rs.)	Variable Charges (Rs.)	Proposed SOC (Rs.)	Variable Charges (Rs.)	Approved SOC (Rs.)	Variable Charges (Rs.)
1	LT Supply						
A	Single Phase						
i	For load up to 0.5 kW	500	NIL	1,000	NIL	950	NIL
ii	For load above 0.5 kW and up to 10 kW	1,000	NIL	2,000	NIL	1,500	NIL
B	Three Phase						
i	Motive power up to 21 HP or other loads up to 16 kW.	2,500	NIL	4,000	NIL	3,500	NIL
ii	Motive power above 21 HP but up to 107 HP or other loads above 16 kW but up to 80 kW.	6,500	NIL	10,000	NIL	8,000	NIL
iii	Motive power above 107 HP but up to 200 HP or other loads above 80 kW but up to 150 kW.	12,000	NIL	17,000	NIL	13,000	NIL
2	HT Supply						
i	H.T. Supply up to 500 kVA.	15,000	20 Per kVA for excess load above 500 kVA.	24,000	50 Per kVA for excess load above 500 kVA.	20,500	30 Per kVA for excess load above 500 kVA.

Notes: 1) In case MSEDCL permits an applicant to carry out the works through a Licensed Electrical Contractor (LEC), a rate of 1.30 % of the normative charges will be applicable towards supervision charges.

2) In case of extension of load, the normative charges will be applicable on the total load (existing as well as additional load demanded) as per the load slabs indicated above.

**Table 127: Service connection charges for new underground connections as approved by the Commission**

Sr. No..	Category	Existing service connection charges as per Case 70 of 2005 (Rs.)	Service connection charges proposed by MSEDCL (Rs.)	Service connection charges approved by the Commission (Rs.)
		Inclusive of material cost of MSEDCL		
1	L.T. Supply			
A	Single Phase			
i	For load up to 5 kW	2,000	4,000	3,000
ii	For loads above 5 kW & up to 10kW	4,000	8,000	7,000
B	Three Phase			
i	Motive power up to 27 HP or other loads up to 20 kW	8,000	14,000	13,000
ii	Motive power above 27 HP but up to 67 HP or for other loads above 20 kW but up to 50 kW	14,000	23,000	20,000
iii	Motive power above 67 HP but up to 134 HP or for other loads above 50 kW but up to 100 kW	30,000	48,000	40,000
iv	Motive power above 134 HP but up to 201 HP or for other loads above 100 kW but up to 150 kW	45,000	72,000	61,000
2	H.T. Supply			
i	H.T supply up to 500 kVA	175,000	200,000	200,000
ii	H.T supply above 500 kVA	195,000	225,000	220,000

Note: 1) The road opening charges vary from area to area hence will be levied on actual basis.

- 2) In case MSEDCL permits an applicant to carry out the works through a Licensed Electrical Contractor (LEC), a rate of 1.30 % of the normative charges will be applicable towards supervision charges.
- 3) In case of extension of load, the normative charges will be applicable on the total load (existing as well as additional load demanded) as per the load slabs indicated above.

## 6.6 Cost of meter and meter box

- 6.6.1 As per Section 14.1.3 of MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005, a consumer of a distribution licensee can purchase a meter from the distribution licensee or from any supplier of correct meter in accordance with the specifications laid down by CEA.

6.6.2 MSEDCL submitted that it has proposed lower rates for meter cost as the meter cost of various types seemed to be reduced as per CPA rates. Further, no cost for meter box was proposed as it is to be supplied by MSEDCL. It also added that the cost will be taken as per the existing rules and Regulations.

6.6.3 The Commission verified the meter costs proposed by MSEDCL on the basis of index related CAGR and found the rates reasonable. Accordingly, the Commission approves the rates proposed by MSEDCL as indicated in table below, which would be applicable only in case of a burnt or a lost meter or where a consumer opts to purchase the meter from MSEDCL.

**Table 128: Cost of meter and meter box approved by the Commission**

Sr. No.	Type	Existing service connection charges as per Order in Case No. 70 of 2005 (Rs.)	Proposed charges (Rs.)	Approved charges (Rs.)
	Applicable in case consumer opts to purchase the meter from MSEDCL & in case of Lost & Burnt Meter			
1	Single Phase Meter without box			
	a) Plain Meter	700	600	600
	b) RF Meter	-	1,500	1,500
	c) Pre-Paid Meter	-	2,700	2,700
	d) Pre-Paid Meter Interface	-	900	900
2	Single Phase Meter with box	Nil#	-	Nil#
3	Three Phase Meter without box	3,110	2,500	2,500
4	Three Phase Meter with box	Nil#	-	Nil#
5	H.T. ToD Meter	5,227	4,000	4,000
	Applicable in case consumer opts to purchase the metering cabinet/cubicle from MSEDCL			
6	C.T. operated metering cabinet including CTs, MCCB & meter			
	a) 50/5A	22,400	21,000	21,000
	b) 100/5A	22,400	22,500	22,500
	c) 150/5A	22,360	22,500	22,500

Sr. No.	Type	Existing service connection charges as per Order in Case No. 70 of 2005 (Rs.)	Proposed charges (Rs.)	Approved charges (Rs.)
	d) 200/5A	22,360	22,500	22,500
	e) 250/5A	22,360	22,500	22,500
7	H.T. Metering Cubicle including C.T. & P.T.			
	a) 11kV	67,958	85,000	82,200
	b) 22kV	108,731	130,000	130,000
	c) 33kV	-	190,000	190,000

Note: # Meter box will be provided by MSEDCL at its own cost.

## 6.7 Miscellaneous and general charges

### (1) Installation testing fees

- 6.7.1 Regulation 9 of MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 provides that the wiring of consumer's premises shall conform to the standards specified in the Indian Electricity Rules, 1956. As per Rule 47, it is the duty of the supplier to inspect and test applicant's installation before connecting the supply. As per Rule 53(1), the cost of first inspection and testing of a consumer's installation carried out in pursuance of the provisions of Rule 47 shall be borne by the supplier and the cost of every subsequent inspection and test shall be borne by the consumer.
- 6.7.2 MSEDCL submitted that the first testing of a consumer's installation will be free of cost as done currently. For every subsequent inspection and test, it proposed higher rates of installation testing fees than existing rates, considering the increase in labour cost.
- 6.7.3 For estimating installation testing fees, considering the labour involved, the Commission has considered the Consumer Price Index (Industrial Workers) published by the Labour Bureau, Government of India to escalate previously approved charges via Order in Case No. 70 of 2005 to arrive at the testing fees. Accordingly, the Commission approves the installation testing fees as indicated in Table 129 below.

### (2) Reconnection charges

- 6.7.4 With regard to reconnection charges, MSEDCL stated that it has proposed higher rates considering the increase in labour cost. It also proposed that such higher charges in conjunction with timely disconnection may act as a deterrent factor to a certain extent and may motivate the consumers to pay the energy bills on time. This is for encouraging prompt payment and to discourage the consumer from becoming a defaulter.
- 6.7.5 With regard to MSEDCL's submission above, the Commission is of the opinion that timely disconnection of supply for default against valid dues itself would work as a sufficient deterrent to the consumer. Considering the provision of Section 56

of EA, 2003, wherein it is expressly mentioned that the licensee can recover the cost incurred for cutting of and reconnecting supply, the irrationally high charges as proposed by MSEDCL are not justified. Further, MSEDCL has not furnished any calculations about the cost involved in disconnection and reconnection. The Commission has considered the Consumer Price Index (Industrial Workers) to escalate existing charges as approved vide Order in Case No. 70 of 2005. Therefore, the Commission directs MSEDCL to recover reconnection charges as indicated in Table 129 below.

### **(3) Changing location of the meters within the same premise at consumer's request**

- 6.7.6 MSEDCL submitted that it has proposed higher rates for changing location of the meters within the same premise at consumer's request, considering the increase in cost of material, labour and all other costs, etc. required for changing location of meter.
- 6.7.7 Considering the average cost of material and labour involved in shifting of meter, the normative charges of Rs. 300/- proposed by MSEDCL appears to be unreasonable. Considering the Consumer Price Index (Industrial Workers), the Commission has escalated existing charges as approved vide Order in Case No. 70 of 2005. Accordingly, the approved charges are shown in Table 129 below. However, when MSEDCL desires to have the location changed, then the cost of such shifting shall be entirely borne by MSEDCL.

### **(4) Testing of meters**

- 6.7.8 MSEDCL submitted that it has proposed charges for testing of meters considering the increase in manpower cost, testing equipment cost, maintenance cost, duration of testing, etc.
- 6.7.9 Further, MSEDCL stated that single phase meters and polyphase meters are tested at the division level testing and filter unit whereas LTMD (with and without CTs) and Trivector meters are exclusively tested at testing laboratories. MSEDCL submitted that for testing of single Trivector meter more than half a day is required. Staff involved for this testing comprises one Junior Engineer, one Artisan and one Helper, as various tests get carried out as per the IS. Besides these tests, which are performed on test benches, the meter data is required to be downloaded to MRI and further uploading from MRI to the PC is necessary. MSEDCL added that this work requires software from meter manufacturer/MRI manufacturer. Many a time problems in data downloading are required to be sorted out in consultation with the manufacturer. In several occasions, all these take two to three days to complete the testing. MSEDCL submitted that considering the costly automatic equipment, service, maintenance, electricity cost and all other costs, it has proposed higher rates.
- 6.7.10 The Commission noticed that MSEDCL has proposed new categories under testing of meters like metering equipments like CT/PT per unit for LT, for HT up to and including 33 kV and for EHT above 33 kV. Also, MSEDCL proposed new charges under the head of 'Testing of meters at TQA (Testing Quality Assurance) Laboratories' for testing of single phase meter, three phase meter, three phase LTCT Operated meter, HT ToD and ABT/Apex meter having different applicable IS.

- 6.7.11 MSEDCL proposed the testing charges on the basis of type of meter, duration for testing, and its accuracy class, according to which the rates for testing charges are varied.
- 6.7.12 MSEDCL reported that as per the CEA's metering guidelines, the licensee shall take immediate action to get the accreditations of their existing meter testing laboratories from National Accreditation Board for Testing and Calibration Laboratories (NABL). Accordingly, MSEDCL is in the process of getting NABL accreditation and the final audit of its Nagpur laboratory is already over and accreditation is awaited.
- 6.7.13 Further, MSEDCL compared the various rates received from NABL standard testing laboratories and proposed the rates for testing of meters at its NABL accredited laboratories. MSEDCL added that as it is going to start the testing in NABL accredited laboratories on a commercial basis, the rates have been proposed so as to attract the other electricity utilities, important EHV/HT consumers, industrial consumers, sugar industries, etc. for getting the maximum testing work at its NABL accredited laboratories for generating additional revenue for MSEDCL.
- 6.7.14 MSEDCL further stated that TQA laboratory has staff of one Deputy Executive Engineer, one Junior Engineer, one Artisan-A and Junior Technician. The testing parameters include no load current, starting current, test of accuracy (errors) and long duration test (Dial Test). MSEDCL submitted that considering the costly automatic equipments, service, maintenance, electricity cost and all other costs, higher rates are proposed. MSEDCL added that the proposed charges of TQA laboratory are for those meters which are presently tested in NABL accredited laboratories and are in line with the existing charges of NABL accredited laboratory.
- 6.7.15 The Commission noticed that MSEDCL has not furnished any calculations about the cost involved in testing of meters. In absence of the details, the Commission views the proposed charges for existing categories of meters as specified in the Order in Case No. 70 of 2005, to be unreasonable. In order to rationalize the existing charges, the Commission has used Consumer Price Index (Industrial Workers) to escalate existing charges as approved vide Order in Case No. 70 of 2005. For new categories of meters, the Commission has approved the charges as proposed by MSEDCL.
- 6.7.16 In view of the above, the Commission directs MSEDCL to recover reconnection charges as indicated in Table 129 below.

**(5) Administrative charges for cheque bouncing**

- 6.7.17 When a cheque is dishonoured, it is considered to be an offence as per Section 138 of the Negotiable Instruments Act, 1881. The issuer of such cheque can also face legal action. As MSEDCL is not an authority to impose any punishment for such offence under the law, it is not authorized to levy any penal charges. However, it may recover charges towards bank charges and administration expenses towards bouncing of cheque.
- 6.7.18 MSEDCL submitted that penalty charges for cheque bouncing vary from bank to bank and are in the range of Rs. 50 to Rs. 350. Therefore, MSEDCL has proposed Rs. 350 as penalty for cheque bouncing.

6.7.19 The Commission approves the charges towards compensation of bank charges and MSEDCL's administrative charges as proposed by MSEDCL and indicated in Table 129 below.

6.7.20 The summary of miscellaneous and general charges as approved by the Commission is indicated in table below.

**Table 129: Miscellaneous and general charges approved by the Commission**

Sr. No..	Category	Existing service connection charges as per Order in Case No. 70 of 2005 (Rs.)	Proposed charges (Rs.)	Approved charges (Rs.)
<b>1</b>	<b>Installation Testing Fees #</b>			
	Low Tension Service			
	a) Single phase	25	50	50
	b) Three phase	50	100	100
	High Tension Service	200	400	350
<b>2</b>	<b>Reconnection Charges</b>			
	Low Tension Service at Meter incomer			
	a) Single phase	25	100	50
	b) Three phase	50	200	100
	At overhead mains:			
	a) Single phase	25	100	50
	b) Three phase	50	200	100
	At underground mains:			
	a) Single phase	50	200	100
	b) Three phase	50	500	100
	High Tension Supply:	300	1,000	500
<b>3</b>	<b>Changing location of meter within same premises at consumers request *</b>	100	300	200
<b>4</b>	<b>A. Testing of meters</b>			
	a) Single phase	100	200	150
	b) Polyphase meter/RKVAH meter	300	500	500



Sr. No..	Category	Existing service connection charges as per Order in Case No. 70 of 2005 (Rs.)	Proposed charges (Rs.)	Approved charges (Rs.)
	c) LTMD (with or without CTs)	500	1,000	900
	d) Trivector meter	500	3,000	1000
	e) Metering equipments like CT/PT per unit for LT		1,000	1,000
	f) Metering equipments like CT/PT per unit for HT up to and including 33 kV		3,000	3,000
	g) Metering equipments like CT/PT per unit for EHT above 33 kV		5,000	5,000
<b>B. Testing of Meters at TQA Laboratories</b>				
	a) Single Phase		2,000	2,000
	b) Three Phase		9,500	9,500
	c) LT CTOP Meters		10,000	10,000
	d) HT ToD Meters		15,000	15,000
	e) ABT/Apex		20,000	20,000
<b>5</b>	<b>Replacement of meter card for HT consumers</b>	NIL	NIL	NIL
<b>6</b>	<b>Administrative charges for cheque bouncing</b>	Rs. 250 irrespective of cheque amount	350	Rs. 350 irrespective of cheque amount
<b>7</b>	<b>Temporary Supply – Hiring of Meter Charges</b>			
	a) Single phase	NIL	NIL	NIL
	b) Three phase	NIL	NIL	NIL

# Applicable only after first inspection for the release of new service connection

\* Inclusive of material, labour and all other costs.

Service tax will be levied extra as per applicable rates.

## 6.8 Application registration and processing charges

- 6.8.1 MSEDCL submitted that a consumer can submit application for provision of electricity supply, sanction of additional load, shifting of service, etc. MSEDCL added that as per Regulation 4.1 (ix) of MERC Supply Code Regulations 2005, a distribution licensee can recover fees for processing such applications.
- 6.8.2 MSEDCL reported that after receipt of application form, it is primarily required to conduct the following activities:
- Verification and scrutiny of existing location of applicant;
  - Scrutiny of past dues, if any;
  - Existing facility / infrastructure at consumer premises (service line, meter board, etc.);
  - Provision of electrical network and equipment; and
  - Verification of compliances from consumer (payment of charges and appropriate wiring / distribution).
- 6.8.3 MSEDCL submitted that it incurs a cost in conducting the above mentioned activities. Therefore, it has proposed charges for the application registration and processing on a lump sum basis in proportion of the rates approved in Order in Case No. 70 of 2005. The Commission had expressed its views in context of the above mentioned activities vide the Order dated September 8, 2006 in Case No. 70 of 2005. The relevant portion of the said order is reproduced herein under:
- “However, all the above activities fall under normal activities of the Licensee’s staff. As the expenditure on the staff is covered under ARR, the Processing fee should not include the expenditure towards the staff employed for processing the application to avoid double accounting. At the same time the Commission feels that there should be a minimum barrier to discourage frivolous or non-serious consumers.”*
- 6.8.4 Accordingly, the Commission allows MSEDCL to collect an amount towards the processing of application as shown in below table.

**Table 130: Application registration and processing charges approved by the Commission**

Category	Existing service connection charges as per Order in Case No. 70 of 2005 (Rs.)	Proposed charges (Rs.)	Approved charges (Rs.)
New connection/ Change of name/Reduction or Enhancement of load/ Shifting of service/ Temporary connection			
a) Single phase	25	50	50
b) Three phase	50	200	100
c) LT (Agricultural)	50	100	100
d) HT supply up to 33 kV	1,000	2,000	1,700

Category	Existing service connection charges as per Order in Case No. 70 of 2005 (Rs.)	Proposed charges (Rs.)	Approved charges (Rs.)
e) EHV Supply	2,000	5,000	3,400

## 6.9 Schedule of Charges for Open Access

6.9.1 The Commission vide Order dated February 10, 2012 in Case No. 35 of 2011 had ruled as below:

*“..... Further, as per the letter from MSEDCL, the Complainant will have to pay various processing fees and charges for obtaining new Distribution Open Access permission. The Commission observed that no charges could be unilaterally imposed by the Licensee, other than the Schedule of Charges as approved by the Commission.”*

6.9.2 Further, the Commission vide Order dated February 10, 2012 in Case No. 78 of 2011 had directed MSEDCL to submit its proposal in the context of various charges for Open Access. The relevant portion of the said order is reproduced below:

*“In view of the above, it is mandatory for MSEDCL to seek approval of such Administrative Charges/fees, Operating Charges/fees. Further, the Commission rules that MSEDCL should include separate section under its Petition for approval of Aggregate Revenue Requirement outlining (a) expense heads for administrative charges/fees and operating charges/fees and detailed justification thereof (b) proposal for levy of administrative charges/fees and operating charges/fees (c) revenue from such charges/fees during past year.”*

6.9.3 As per the directions of the Commission, MSEDCL submitted its proposal for various charges/fees for Open Access and prayed for the Commission’s approval. The Commission’s view and approval on proposed Open Access charges are illustrated in the following paragraphs.

### Processing and operating charges for Open Access

6.9.4 MSEDCL proposed a processing fee and operating charges of Open Access as shown in below table.

**Table 131: Processing and operating charges proposed by MSEDCL**

Load requisitioned	One time processing fee per application (Rs.)	Operating charges per month (Rs.)
Upto 1 MW	10,000	10,000
More than 1 MW and up to 5 MW	15,000	10,000

Load requisitioned	One time processing fee per application (Rs.)	Operating charges per month (Rs.)
More than 5 MW and up to 20 MW	30,000	20,000
More than 20 MW and up to 50 MW	50,000	50,000
More than 50 MW	100,000	100,000

### Administrative charges for Open Access

- 6.9.5 MSEDCL also proposed a one time administrative charges at the rate of Rs. 50,000 in lump-sum, proposing to be paid by the Open Access consumer annually in the month of April every year, i.e. at the commencement of the financial year.
- 6.9.6 MSEDCL submitted that it needs to carry out various functions in respect of a consumer availing Open Access on its distribution network, which are as below:
- Establishment of separate Wind Mill sub-division office at Circle (District) level.
  - Deputation / deployment of engineers and staff.
  - Providing vehicle for Monthly Joint Meter reading
  - Carrying out pre-commissioning testing of WTG
  - Issuance of permission for commissioning
  - Entering into Energy Purchase Agreements
  - Issuance of periodical Open Access permissions
  - Monthly Joint Meter Reading
  - Special Joint Meter Reading for the purpose of REC
  - Preparation of generation credit notes by deducting applicable losses
  - Recovering of wheeling charges (distribution & transmission)
  - Issuance of generation credit notes (GCN)
  - Providing staff for taking Line Permit for Maintenance of line
  - Recording change of name/change of ownership, if any.
- 6.9.7 MSEDCL submitted that it incurs a cost in carrying out the above activities though these are not related to serving its own consumers. Therefore, these activities must be carried out in a commercial manner. Also, sufficient care must be taken to ensure that the common consumer is not burdened by services offered to non consumers. MSEDCL stated that therefore, it is not out of place to charge Open Access consumers for the services provided to them.
- 6.9.8 MSEDCL submitted, when the Open Access consumer is connected on EHV network i.e. on 220 kV level and is not required to pay any amount to MSEDCL towards wheeling charges.
- 6.9.9 MSEDCL further stated that as per MERC (Distribution Open Access) Regulations, 2005 the contract demand of open access consumer shall get terminated and therefore will cease to be a bonafide consumer of MSEDCL. However, MSEDCL has to provide the following services to the said Open Access consumer.

- a) Deputation / deployment of engineers and staff and providing vehicle for installation and checking of ABT meter and for Monthly Joint Meter Reading
  - b) Conciliation of monthly energy accounting in accordance with the MSLDC report and Joint Meter Reading and raising of bills, if any.
  - c) Issuance of periodical Open Access permissions
  - d) Maintaining OA consumer record and recording change of name/change of ownership, if any.
- 6.9.10 MSEDCL submitted that in view of the above, the concept of Open Access has commercial angle and as such the distribution licensee cannot be expected to provide the services free of cost or at a subsidized rate to a non consumer. MSEDCL further mentioned that therefore, it was necessary to levy certain charges in order to take care of the administrative and operating expenses and also for processing the Open Access applications. By proposing these charges, MSEDCL expected to protect the commercial interest of the distribution licensee and its consumers.
- 6.9.11 The Commission noticed that MSEDCL did not submit the expense heads for administrative charges/fees and operating charges/fees and detailed justification thereof. MSEDCL has submitted common reasons and explanation for all proposed charges for Open Access i.e. application processing charges, operating charges and administrative charges. Further, it has not submitted any details of computations justifying various charges proposed for providing Open Access.
- 6.9.12 The Commission asked MSEDCL to submit the reasons justifying each charge separately, details of computation of proposed Open Access charges, the number of Open Access consumers and the amount of money recovered from them till date, etc. However, MSEDCL did not reply to the above query.
- 6.9.13 Though MSEDCL has mentioned the activities required to be carried out for Open Access consumers, the Commission is of the view that most of the above activities fall under normal activities of MSEDCL as a licensee. As the expenditure on the staff is covered under ARR, there is no merit in including these expenses under the charges like application processing fee, operating charges and administrative charges. At the same time the Commission is of the view that there are a few services required to be provided by MSEDCL to Open Access consumers, where MSEDCL may incur some costs. However, the Commission does not agree with MSEDCL's contention that no surcharge is applicable to an EHV Open Access consumer, as by virtue of the Commission's Order dated 9 September, 2009 in Case 43 of 2010, all EHV consumers availing Open Access need to pay cross subsidy surcharge as determined in the said Order.
- 6.9.14 In the absence of any detailed justification and computations, the Commission considers the operating charges proposed by MSEDCL to be unverifiable.
- 6.9.15 With regard to application processing fee, the Commission compared the charges proposed by MSEDCL with transmission Open Access charges applicable for Maharashtra and a few other states. The Commission also referred the FOR's 'Model Terms and Conditions of Intra-State Open Access Regulations, 2010. The Commission is of the view that the charge proposed by MSEDCL is reasonable. In view of the above, the Commission approves the processing fee per application and operating charges per month as indicated in the table below.

- 6.9.16 In the context of administrative charges, the Commission is of the view that the purpose of administrative charges and operating charges is common i.e. to recover the operational cost incurred by the distribution licensee. Therefore, having approved the monthly operating charges, the Commission does not find any merit in considering administrative charges separately as proposed by MSEDCL. Accordingly, the Commission has not approved any administrative charges for Open Access.
- 6.9.17 The summary of Open Access charges approved by the Commission is given below.

**Table 132: Processing and operating charges approved by the Commission**

Load Requisitioned	Processing fee per application (Rs.)	Operating Charges per month (Rs.)
Upto 1 MW	10,000	10,000
More than 1 MW and up to 5 MW	15,000	
More than 5 MW and up to 20 MW	30,000	20,000
More than 20 MW	50,000	

## 6.10 Clarification

- 6.10.1 Through this Order the Commission is revising the schedule of charges. However, various principles set out in the Order dated 8 September, 2006 in Case No. 70 of 2005, and subsequently clarified through various Orders of the Commission, in relation to recovery of charges remain valid.

## **7. COMPLIANCE WITH DIRECTIVES AND FURTHER DIRECTIVES**

### **Background**

MSEDCL submitted its Petition in Case No. 19 of 2012 on 24 February, 2012. However, it did not submit the compliance to various directives issued by the Commission in previous Tariff Orders. During the TVS, the Commission directed MSEDCL to submit the status of compliance to various directives issued by the Commission. MSEDCL submitted the status of compliance of these directives along with the replies to the data gaps identified by the Commission before the TVS and also included the same in the Revised Petition submitted after the TVS.

The status of compliance to directives of the Commission and Commission's analysis and ruling on the status is as follows:

### **Past Directives**

#### **7.1 Interest on Consumer's Security Deposit**

##### **Directive**

Based on the complaints of certain consumers that MSEDCL is not paying the interest on security deposits, the Commission had directed MSEDCL to pay interest on security deposit to the consumers in time.

##### **MSEDCL's response**

MSEDCL submitted that it is making all efforts to make the payment of interest on security deposit to consumers in the energy bill for the month of April every year and thus complying with the directives of Hon'ble Commission.

##### **Commission's ruling**

The Commission has noted the response of MSEDCL. However, MSEDCL is directed to clarify whether it has paid the interest on security deposit for FY 2011-12 in April 2012 or not. If the same has not been done, MSEDCL should clarify its constraints and problems in paying the interest on security deposit in the month of April and make necessary payment in the next billing cycle in case it has not been passed through.

#### **7.2 Recovery of past arrears**

##### **Directive**

Based on the arguments of certain consumers that MSEDCL is not taking appropriate action to recover past arrears, the Commission had directed MSEDCL in the Order in Case No. 100 of 2011 to submit a roadmap for recovery of arrears within thirty (30) days from the date of the said Order.

##### **MSEDCL's response**

MSEDCL submitted the details of year – wise and category – wise arrears payable by the consumers for the period from FY 2005-06 up to February 2012. From the data submitted by MSEDCL, it was observed that the total arrears payable by the consumers as on 31 March, 2005 was Rs. 7,728 crore, which has increased to Rs. 16,390 crore as on February 29, 2012. MSEDCL submitted that the arrears payable by the consumers of different categories are increasing in terms of absolute value and it is taking effective steps and concentrated efforts for recovery of the said arrears.

MSEDCL further submitted that in last three years, it has taken concentrated efforts to ensure that at least the arrears are not increasing. MSEDCL added that the current energy bills are being fully recovered from the consumers regularly and hence a declining trend in arrears is observed. MSEDCL submitted that the information on category-wise arrears, as provided by it in the Petition, also indicates the breakup of principal amount of arrears & interest and it can be seen that principal amount of arrears of most of the categories of consumers has reduced in FY 2010 – 11 as compared to previous year. MSEDCL further submitted that the collection efficiency in last two - three years has improved.

MSEDCL also submitted in detail, the steps taken by it to recover the pending arrears.

### **Commission's ruling**

The Commission has noted the steps taken by MSEDCL and various schemes initiated by MSEDCL for recovery of arrears. The Commission appreciates that MSEDCL can take recourse to only those methods of recovering arrears from defaulting consumers, which are permissible under law. However, it is also obvious that the recovery of this significant amount of arrears would ease the financial situation of MSEDCL.

From the data submitted by MSEDCL, the Commission observes that the arrears (both principal amount and interest) have gone up in FY 2012 (as on February 2012) as compared to last year. A further increase in the arrears from an already significant amount of Rs. 15,487 crore in FY 2010-11 is unacceptable. The increase in arrears implies that the steps taken by MSEDCL to arrest the increase in arrears are not sufficient.

Along with the steps taken for recovery of past arrears, it is also necessary to concentrate on steps which can be taken to prohibit those consumers from defaulting on payment of electricity bills, which believe that they can easily avoid the payment of electricity bills as there is no proper system to penalise them. Some innovative ways of putting restrictive covenants, which prohibit consumers from defaulting on electricity bills, must be taken.

## **7.3 Mismanagement of Operations**

### **Directive**



During the public hearing proceedings of the Petition in Case No. 100 of 2011, Yashvantrao Chavan Pratishtan & Shri Vivek Velankar had made certain allegations regarding purchase of ToD meters in Pune. The Commission had directed MSEDCL to submit the clarification within a period of 30 days from the date of Order.

### **MSEDCL's response**

MSEDCL submitted the following response in relation to status on compliance of the above directive:

*It was decided to install Apex HT ToD meters to HT consumers having electric supply arrangement from more than one feeder. This metering system is having very high accuracy. In case of change of supply from one feeder to another feeder clubbing of CT and PT changeover is avoided.*

*As per requirement, Chief Engineer Pune Zone had floated two separate tenders for supply, erection, testing and commissioning of Apex HT ToD meters and its allied equipments for HT consumers having electric supply arrangement from more than one feeder under Ganeshkhind Urban Circle (GKUC) and Pune Rural Circle (PRC) for Rs. 100.00 lakhs each by following MSEDCL procedure.*

*Copy of the Tender Notice was sent to the manufacturer i.e. M/s. Secure Meters Ltd. for information. In response, M/s. Secure Meters Ltd. vide letter No. SML/MUM/2009/126 Dated 27-04-2009 informed that, their authorized dealer M/s Signet Products (P) Ltd., Aurangabad will quote rate on their behalf.*

*After following due procedure, order was placed on 28-05-2009 with M/s Signet Products (P) Ltd., Aurangabad for supply, erection, testing and commissioning of Apex HT ToD Meters with its allied equipments as below. Delivery period was 120 days from the date of issue of the order.*

<b>Sr. No.</b>	<b>Particulars</b>	<b>Qty.</b>	<b>Rate Rs./unit</b>	<b>Order value</b>
1	Apex ToD meters under GKUC	5 nos.	17,24,250.00	93,52,750.00
2	Apex ToD meters under PRC	5 nos.	17,24,250.00	90,39,350.00

*Being a new concept at that time, and cost data was not available for this item. Reasonability of rate was therefore observed by comparing rate with order placed by other MSEDCL offices and private Companies.*

*As regards to the allegation made by Shri. Vivek Velankar and article published in the Maharashtra Times on June 6, 2011 it is to state that, the matter was taken up with the manufacturer M/s. Secure Meters Ltd. vide Chief Engineer Pune Zone letter No. 5699 dated 26-07-2010. In response, M/s. Secure Meters Ltd. vide letter No. SML/MUM/RGS/ MSEDCL/2010/509 dated 05-08-2010 replied that "IIT Mumbai had approached us directly for purchase of Apex Summation Meters for demonstration to students the latest technology and products available in local market. As a part of corporate social responsibility to impart education of latest trends and help to spread the technological competence of our company, We had supplied the Accuchek meters to IIT in past towards this endeavor. We were asked by IIT Mumbai to receive order from M/s Tata Power. M/s Tata Power have installed and commissioned the system. Regarding the price of M/s Signet Products (P) Ltd., we wish to clarify that the prices offered by them is inclusive of installation charges and similar price are being offered to other consumers in Maharashtra."*

*It is further submitted that, the price offered by M/s Signet Products (P) Ltd., Aurangabad is similar to price offered to other consumers in Maharashtra. Further, the rate of M/s Tata Power Company is for only supply of material, whereas, that of purchased by our office is supply and its erection, testing and commissioning.*

*After giving inspection call by the supplier, EE (Testing) was deputed for testing of these Meters at factory site Solan (HP). Testing of Meters was done between 07-01-2010 to 09-01-2010. After inspection of Meters at factory site but before pre-dispatch, some modifications were suggested by Testing Team.*

*As well as after dispatch, the Meters were sent again to factory for changing some parameters as per remarks of GKUC Testing Dn. After re-inspection and testing the Meters, Meters were received to Stores. After receipt at Stores, these Meters were again tested at TQA Lab in January-2011. Delay in installation was occurred at various levels i.e. manufacturer, supplier, testing etc.*

*All 10 Meters purchased, are already successfully installed and commissioned in GKUC and PRC.*

*11) Following comparative table will show factors affecting variation in rate between M/s Tata and MSEDCL (PZ).*

<b><i>Particulars</i></b>	<b><i>Tata Power</i></b>	<b><i>MSEDCL (PZ)</i></b>
<i>Nature of order</i>	<i>Only supply of Meters at one place</i>	<i>Supply, installation, testing and commissioning of Meters at different places.</i>
<i>Guarantee Period</i>	<i>One year</i>	<i>5 years</i>
<i>Payment condition</i>	<i>100% within 30-45 days</i>	<i>Only 80% payment is released after one year.</i>
<i>Retention of 10% S.D. for 5 years</i>	<i>No S.D. clause</i>	<i>Yes.</i>
<i>Outage of power supply required</i>	<i>Easily available</i>	<i>Difficult to get outage approval</i>

*Considering the facts of the case as above, it is stated that there is no mismanagement in the operations of MSEDCL as has been alleged.”*

#### **Commission’s ruling**

The Commission has noted the response of MSEDCL. However, MSEDCL should ensure maximum participation in tenders while procuring equipment/services, so that the procurement is at the most competitive prices.

#### **7.4 Details of Agriculture Consumers**

##### **Directive**

The Commission had directed MSEDCL to provide all details regarding agricultural consumers while submitting its next Petition for Tariff determination and mentioned that the data shall be presented for the last five years.

##### **MSEDCL’s response**

MSEDCL submitted that details of the number of agricultural consumers, supply hours to agricultural consumers and number of permanently disconnected consumers have been provided in Paragraph 2.4.3 of the Petition in Case No. 19 of 2012 for approval of final True up for FY 2010-11, ARR for FY 2011-12, and FY 2012-13 and Tariff determination for FY 2012-13 as directed by the Commission.

##### **Commission’s ruling**

The Commission has noted the compliance.

## 7.5 Tariff based on actual circle wise distribution losses

### Directive

During the public hearing proceedings in Case No. 100 of 2011, one of the objectors had suggested that MSEDCL should provide incentive to consumers in the circles, where losses are lower as compared to targets, by giving benefit based on efficiency. In this regard, the Commission had directed MSEDCL to address this issue in the next Tariff Petition.

### MSEDCL's response

MSEDCL has submitted that it has addressed this issue in Paragraph 10.10 of the Petition in Case No. 19 of 2012. In the said paragraph, MSEDCL has averred that proposal of implementation of differential Tariffs for circles based on distribution losses are not correct. It has submitted that distribution loss is a function of LT: HT Ratio, Status of Infrastructure, consumer mix, voltage level of supply, etc. The imposition of differential Tariffs in different circles will penalise those consumers in circles with higher losses which do not indulge in theft. MSEDCL further added that since the circle-level distribution losses are derived based on division-wise losses, imposition of differential Tariffs in different circles will penalise those divisions in circles with high distribution losses which have lower distribution losses.

MSEDCL added that the consumers of circles with higher distribution losses are already penalised by the way of higher load shedding in those areas.

### Commission's ruling

The Commission acknowledges MSEDCL's concerns while proposing a differential Tariff or some other form of benefit for consumers of circles with lower distribution losses. The Commission is still evaluating the imposition of a loss surcharge/ penalty. However, at this stage, the Commission is not implementing any loss surcharge or incentive.

## 7.6 Action Plan for DTC metering

### Directive

The Commission had directed MSEDCL to:

- a) Submit action plan for 100% completion of DTC metering within 30 days from the date of the Order and to Submit sample (circle wise) DTC wise energy audit reports within 30 days from the date of the Order ;*
- b) Take up massive programme of metering all the unmetered agricultural consumers and submit an action plan for the same within 30 days from the date of the Order;*
- c) Complete metering of unmetered agricultural connections (released during FY 2010-11) on priority within six months from the date of this Order, and report compliance of the same;*

d) under any circumstances no new connection shall be released under unmetered category“

### **MSEDCL's response**

#### **Action plan for 100 % DTC metering in MSEDCL:**

MSEDCL submitted that taking into account the advantages of DTC energy audit and the regulatory mandate for the same, DTC metering activity has been taken up by MSEDCL in different phases under different schemes viz., APDRP, DTC Metering Phase-I, Phase-II, Phase-III, etc.

MSEDCL further added that considering the practical difficulties on field in rural areas and limitations in respect of the available resources, it has been observed that DTC energy audit concept is not able to deliver the desired results. Hence it has been decided by the competent authority that the micro-monitoring of the energy accounting activity through DTC energy audit is to be observed strictly restricting its scope to the urban areas i.e to the extent from District level to the Taluka level only.

MSEDCL submitted that of the total quantum of 66,150 urban DTCs available on the field, metering of 63,525 DTCs has already been completed and it is proposed to complete balance of 2,625 DTCs, in due course of time. MSEDCL further submitted that as mentioned above, 90,356 rural unmetered DTCs are not being considered for the metering activity.

MSEDCL submitted the data for circle-wise metered and un-metered single phase and three-phase DTCs. MSEDCL also submitted the status of completion of work of metering of three-phase DTC in urban zones. MSEDCL also submitted a sample, circle-wise, DTC-wise energy audit report.

#### **Metering of all the un-metered agriculture consumers**

MSEDCL submitted that prior to April 2000, three categories of consumers, namely – HT/LT Agriculture, rural public water works and low tension power loom had an option of opting for un-metered power supply. In April 2000, Commission in its first Tariff Order, had asked MSEDCL to provide new connections on metered basis only and to install meter to all consumers within a time span of three years.

MSEDCL submitted that as on May 2000, the number of consumers having un-metered supply was as follows:

<b>Sr. No.</b>	<b>Category</b>	<b>Total number of un-metered consumers as on 6 March 2000</b>
1	Agriculture	1823629 (Including 1140 number of HT Agriculture Consumers)
2	Rural PWW	27534
3	Power Loom	45495

MSEDCL submitted that it has already provided meters to all the unmetered consumers under Rural PWV and Power Loom category. MSEDCL further submitted the year-wise details of metering of unmetered agriculture consumers which is represented below.

Sr. No.	Year	Total Number of Un-metered consumers provided meters
1	2000 – 01	18135
2	2001 – 02	20530
3	2002 – 03	21513
4	2003 – 04	27413
5	2004 – 05	31542
6	2005 – 06	46003
7	2006 – 07	80368
8	2007 – 08	86611
9	2008 – 09	50195
10	2009 – 10	33302

MSEDCL submitted that during the FY 2010-11, it had undertaken a special drive for reduction of commercial losses throughout the State (licensee area). During the drive, several illegal and unauthorized agricultural connections were noticed, where power supply was obtained by hooking directly into supply lines. MSEDCL submitted that although it had initiated legal action against such miscreants, it was also thought necessary to immediately provide authorized power supply to such persons who were found involved in such unauthorized use of electricity. Most importantly, it was also noticed that in some cases the person found involved in unauthorized use had already submitted application for power supply for his agricultural pump, which was pending for some reason. The provision of appropriate metering to all such illegal connections being not possible immediately, it was decided to regularize these unauthorized connections without providing meters.

MSEDCL submitted that though it never had any intention of dishonoring the Commission's directives on metering of un-metered agricultural consumers, it had no other option than to release all these connections without meter so as to ensure that all these consumers are covered in the billing net, which would result in loss reduction. Accordingly, MSEDCL has released power supply without meters to 99,888 agricultural consumers in year FY 2010 – 11 and 90,419 agricultural consumers in FY 2011 – 12 (up to December 2011), which represents about 28.5 % & 43.4 % of total agricultural connections released in respective financial years. MSEDCL submitted that the said action of MSEDCL of releasing un-metered power supply to agricultural consumers was informed to the Commission vide letter No. Dir(OP)/CE(dist)/D-III/MERC/1133 dated 12/01/2011. MSEDCL further submitted that release of such un-metered agricultural consumers should not be seen as willful contravention of the directives given by the Commission, since release of such unmetered consumers was on account of practical difficulty of providing metering to all these consumers in short notice. MSEDCL further

submitted that if it would not have proactively regularized these unauthorized connection, these consumers would have continued with unauthorized power supply since continuous physical watch on all these consumers is difficult. MSEDCL added that the said action of MSEDCL to release un-metered power supply to agricultural consumers therefore needs to be considered as an interim arrangement to control unauthorized use of electricity & also to increase revenue income.

MSEDCL submitted that though it has made several attempt to expeditiously install meters to all the un-metered agricultural consumers, it has come across two major hurdles, i. e. strong opposition of consumer & provision of capital expenditure. There have been instances of removal, damaging as well as throwing of installed meters forcefully by mobs and man handling the staff of MSEDCL creating law & order situations in the field during metering as reported by the field offices. MSEDCL submitted that there is acute shortage of good quality 3-phase static energy meters, which is making difficult for MSEDCL to implement the program of providing meters to un-metered agricultural consumers. MSEDCL added that is further observed that even after meters are installed / provided to un-metered agricultural consumers, meter reading of these consumers is very difficult because of below mentioned constrains.

- a) During rainy season or non-working period, the consumers generally remove the meter and keep at home;
- b) Meter Boxes are mostly locked;
- c) Average distance between two consumers being too long, it is very difficult for the meter reader to approach more & more consumers in a day, due to lack of proper means of conveyance;
- d) During rainy season, the situation further worsens and puts more & more limitation on the meter readers;
- e) Most of the time, the consumer / land owner is not available at the time of meter reading, since he generally visits his field during night hours when power supply is available; and
- f) Due to load shedding during day time, power supply is generally not available for taking reading.

MSEDCL submitted that in such circumstances, it appears to be not only difficult, but also unrealistic, uneconomical & unviable to install meters to un-metered Agriculture consumers. MSEDCL added that it has therefore prepared an action plan of group metering of un-metered agricultural consumers. Accordingly, MSEDCL has decided to install appropriate metering at substation for all separated Agriculture feeders & in case of mixed feeders, metering will be provided on all Agriculture dominated DTCs. Once installation of meters on separated Agriculture feeders & Agriculture dominated DTCs on mixed feeders is complete; MSEDCL would be able to record the collective consumption of all the agricultural un-metered / metered consumers situated on such separated agricultural feeder or the agricultural dominated DTC. The total connected load (HP) of all such un-metered / metered agricultural consumers installed on agricultural separated feeder or

agricultural dominated DTC being known, consumption per HP can be determined, which can be used for estimating the consumption of individual consumer depending up on the connected load of such consumer. Accordingly, MSEDCL submitted that it has prepared the action plan as follows:

*“Out of 2668 agricultural dominated feeders, so far MSEDCL under the Gaathan Feeder Separation Scheme has separated 2,400 feeders and balance feeders & will be separated by June 2012. 1954 Mixed Feeders are covered under Single phasing scheme & energy meters are provided on each feeder at respective substation.*

*The status of meters provided to such separated feeders shall be verified & ascertained by September 2012;*

*The meters provided to the separated agricultural feeders shall be tested / calibrated within a period of six months thereafter;*

*Similarly, during the period of said six months, working conditions of CT / PT including wiring, ratio, etc. will be verified & confirmed so as to ensure generation of proper data for billing un-metered agricultural consumers;*

*Connectivity of agricultural dominated DTC with the separated agricultural feeder will be verified and conformed by December 2012 and the same will be up dated in the billing system;*

*The complete data of agricultural dominated DTC & separated agricultural feeder will be compiled and up dated in the billing system by March 2013;*

*Agricultural dominated DTC-wise consumers will be simultaneously mapped and the process shall be completed by June 2013 and the billing data will be accordingly updated by September 2013;”*

MSEDCL submitted that once such arrangement of first collectively recording the consumption of un-metered agricultural consumers and then using the per HP consumption factor to determine the consumption of individual agricultural consumer becomes operative, there would be no requirement for metering individual agricultural consumers and therefore the directives given by the Commission regarding metering of all un-metered consumers will be automatically be complied with.

### **Commission’s ruling**

The Commission has noted the response of MSEDCL. However, the Commission directs that all new connections should be provided on metered basis only. The Commission directs MSEDCL to ensure availability of meters and quicker processing of applications for connections so as to ensure that such a situation does not arise again, where it is compelled to provide new connections on unmetered basis. MSEDCL is aware of the problems it is facing while converting unmetered connections to metered connections. Hence, providing further unmetered connections will only worsen the situation. The Commission has noted the group metering scheme initiated by MSEDCL and will further decide on the adequacy of



the system being built under the current scheme on obtaining and analysing the results of this scheme. The Commission directs MSEDCL to complete this scheme of group-metering of agriculture consumers, DTC metering and feeder metering in a time bound manner without any delay.

## **7.7 Study to determine the correct specific consumption for unmetered Agriculture Connections**

### **Directive**

Commission directed MSEDCL to institute a study to determine the correct specific consumption for unmetered agricultural connections based on consumption of metered connections. Commission had directed MSEDCL that it must submit the report containing the findings of such study to the Commission within one year from the date of this Order.

### **MSEDCL's response**

MSEDCL submitted that the unmetered sale under Agricultural category has been ascertained/assessed by it based on a method approved by the Commission. MSEDCL added that unmetered sale being function of the sale of metered consumers, having normal meter status, has shown a rise during FY 2009-10 & FY 2010-11, on account of the rise in normal status capped index. MSEDCL submitted that other factors such as rise in unmetered load on account of new service connection releases and load extensions, increase in supply availability, increase in the percentage of normal billing, etc. are the reasons for the same.

MSEDCL submitted that an in-depth study has been instituted to measure the correct specific consumption for unmetered agricultural connection based on the metered connections, as per the directives of Commission. MSEDCL added that the findings of the study conducted by MSEDCL will be submitted to Commission within stipulated time frame.

### **Commission's ruling**

The Commission has noted the response of MSEDCL.

## **7.8 Energy Accounting**

### **Directive**

Commission had directed MSEDCL to completely review its energy accounting for FY 2010-11 and present the correct energy balance when it submits its Petition for Final Truing up for FY 2010-11.

### **MSEDCL's response**

MSEDCL submitted that it has reviewed energy accounting for FY 2010-11 and has presented the correct energy balance in Paragraph 2.5 of the Petition for approval of

final True up for FY 2010-11, ARR for FY 2011-12, and FY 2012-13 and Tariff determination for FY 2012-13 as directed by the Commission.

### **Commission's ruling**

The Commission has noted the compliance of MSEDCL to the above directive

### **New Directives**

Along with the directives mentioned in the Order in other sections, the following additional directives are hereby given to MSEDCL.

#### **7.9 Data for Distribution Loss Surcharge**

The Commission is evaluating the option of levy of a distribution loss surcharge for high distribution loss areas and/or incentive for low distribution loss areas in the future. However, the Commission does not have the required data to evaluate the impact of the imposition of the surcharge/incentive at this stage. MSEDCL is directed to submit actual circle-wise category-wise sales for FY 2011-12 and actual circle-wise month-wise distribution loss for the last 5 years at the time of filing its next MYT Petition.

#### **7.10 Separate submission of information for 1 MW and above consumers**

MSEDCL is directed to submit information on consumers with a contracted demand of 1 MW and above within sixty (60) days. The information should include the details of consumers, industry, total contracted capacity, consumption (in MUs), revenue, etc. The Commission proposes to introduce a new category for such consumers in the next MYT Order.

#### **7.11 DTC and Feeder Metering**

The Commission observed from the data provided by MSEDCL it is clear that approximately 76% of DTCs have been metered till January 2012. MSEDCL has also submitted in the Petition that some feeders are yet to be metered. The Commission directs MSEDCL to complete 100% feeder metering in a period of six (6) months and 100% DTCs within a period of twelve (12) months from the date of issuance of this Order. MSEDCL should also ensure that the mapping of consumers to DTCs is done immediately. MSEDCL is required to submit a metering plan clearly stating the timeline of achieving the various milestones, within sixty (60) days of issuance of this Order. The Agriculture consumption will be decided by the energy readings of separated agriculture meters only. This information shall be submitted to the Commission in the next MYT Petition.

#### **7.12 MYT Business Plan**

The Commission directs MSEDCL to submit the MYT Business Plan for the period FY 2013-14 to FY 2015-16 by 30 November, 2012.

### 7.13 Performance parameters

The Commission has observed that in the public hearing, a large number of consumers have complained about quality of power and services, voltage fluctuation, frequent interruptions and poor availability. MSEDCL, in its next Tariff Petition, should submit the actual circle-wise performance on voltage fluctuation, reliability indices and period of giving supply for FY 2011-12 and FY 2012-13 as against the approved performance standards. The improved quality performance will be considered by the Commission while approving the Tariff in the next Tariff Order.

Along with the above new directives, the Commission has given some other directives to MSEDCL in this Order, which are enlisted below:

- (1) The Commission has directed MSEDCL to respond to the objection regarding power purchase from M.P. Madhya Kshetra Vidyut Co. within 30 days of issuance of this Order, with a copy marked to the Commission.
- (2) The Commission has directed MSEDCL to submit an action plan for metering of all unmetered consumers within 60 days from the date of issuance of this Order.
- (3) The Commission has directed MSEDCL to appoint a third party independent energy auditor to carry out a detailed feeder wise energy audit for some representative feeders supplying power to unmetered agricultural consumers. This report may be submitted to the Commission along with the report on unmetered agriculture index determination, which the Commission directed MSEDCL vide Order dated 30 December, 2011 in Case 100 of 2011.
- (4) The Commission has directed MSEDCL to expedite the process of collection of outstanding arrears from the distribution franchisees and submit a report on the same within two months from the issuance of this Order.
- (5) The Commission has directed MSEDCL to submit the reconciliation statement of ZLS account within 30 days from issuance of this Order. MSEDCL has also been directed to reimburse the entire excess recovery of ZLS scheme within three months from the issue of this Order.
- (6) The Commission has directed MSEDCL to address the issues raised by various objectors with respect to implementation of a pilot project for reorganisation of staffing pattern in Amravati .
- (7) The Commission has directed MSEDCL to provide a reconciliation of energy at distribution periphery as reflected in the energy balance shown in the Petition and that shown in the SLDC statement for FY 2010-11.
- (8) The Commission has directed MSEDCL to make up for the shortfall of solar RPO in FY 2010-11 by FY 2015-16.
- (9) The Commission has directed MSEDCL to submit the actual energy balance to the Commission for FY 2011-12, properly taking into account the injection and

drawal of power wheeled for Open Access within a period of 30 days from the date of issue of this Order.

(10) The Commission has directed MSEDCL to procure entire short term power through competitive bidding route only.

(11) With respect to problems in procuring power from solar power generating sources to meet the Solar RPO requirement for FY 2011-12 and FY 2012-13, the Commission has directed MSEDCL to make up for the shortfall of procurement in solar RPO cumulatively by FY 2015-16.

(12) The Commission has directed MSEDCL to furnish the information on AAD as required in Form 4 of the Tariff filing formats during the truing-up of FY 2011-12 and FY 2012-13.

(13) The Commission has directed MSEDCL to refund the amount pending to PD consumers in FY 2012-13 and provide a compliance report of the same within one (1) year of this Order.

## **8. TARIFF PHILOSOPHY AND CATEGORY-WISE TARIFFS FOR FY 2012-13**

### **8.1 Applicability of revised Tariffs**

8.1.1 The revised Tariffs shall be applicable from 1 August, 2012. In cases, where there is a billing cycle difference for a consumer with respect to the date of applicability of the revised Tariffs, then the revised Tariff should be made applicable on a pro-rata basis for the consumption. The bills for the respective periods as per existing Tariff and revised Tariffs shall be calculated based on the pro-rata consumption (units consumed during respective period arrived at on the basis of average unit consumption per day multiplied by number of days in the respective period falling under the billing cycle).

8.1.2 The Commission has determined the Tariffs and revenue from revised Tariffs as if the revised Tariffs are applicable for the entire year. The Commission clarifies that any shortfall/surplus in actual revenue vis-à-vis the revenue requirement approved after Truing up, due to the applicability of the revised Tariffs for only eight months of FY 2012-13, will be trued up at the end of the year.

### **8.2 Consolidated revenue gap**

8.2.1 MSEDCL has estimated a revenue gap of Rs. 7,623 crore. To recover this revenue gap it proposed a revised Tariff Schedule for FY 2012-13. MSEDCL's submission indicated an average Tariff hike of 17.68%. However, in a separate Order in Case No. 43 of 2012, the Commission has already allowed MSEDCL to recover Rs. 1483 crore on account of under-recovered FAC. As per the directions in the Order, MSEDCL shall recover the amount during the six month period of June 2012 to November 2012. This Order was issued by the Commission against a separate Petition submitted by MSEDCL, which was filed on 8 May, 2012, much later than it submitted the current Petition for Tariff determination under Case No. 19 of 2012 on 24 February, 2012. In the Petition submitted on 27 February, 2012 MSEDCL encompassed the effects of revenue shortfall due to the under-recovery of FAC while estimating the revenue gap of Rs 7,623 crore. Therefore, in this Order, the Commission has determined the revenue gap of MSEDCL after adjusting for the already allowed recovery of Rs. 1,483 crore.

8.2.2 In sections 3, 4, and 5 the Commission has analysed MSEDCL's submission of determination of ARR and revenue gap. The recovery of the approved gap of Rs. 6,921 crore amounts to 16.48% over the revenue at existing Tariff (without the FAC being charged by MSEDCL at present), including the unrecovered FAC to be recovered as per the Order in Case No. 43 of 2012.

### **8.3 Tariff philosophy proposed by MSEDCL and Commission's ruling**

8.3.1 MSEDCL has proposed certain changes in the Tariff philosophy and Tariff design in its Petition. MSEDCL's submissions and Commission's ruling on each of the submission is discussed in the following paragraphs.

## 8.4 Restoration of Fixed Charges

### **MSEDCL's submission:**

MSEDCL has proposed restoration and rationalization of Fixed Charges for all HT category consumers except HT-II Commercial. The Fixed Charges/ Demand Charges payable by HT consumers belonging to different categories has been proposed to be reinstated to the level of Fixed Charges / Demand Charges prevailing as per Tariff Order dated 20 October, 2006. For HT-II Commercial Category (Others), it has been proposed to increase the Fixed Charges from Rs. 150 per kVA to Rs. 300 per kVA per month.

However, fixed Charges payable by Below Poverty Line (BPL) domestic consumers have been proposed to be increased from Rs. 3 per connection per month to Rs. 10 per connection per month. For LT domestic consumers, other than BPL Category consumers, MSEDCL has proposed telescopic Fixed Charges based on slab-wise consumption.

Similarly, MSEDCL has proposed to increase the Fixed Charges of LT Commercial Consumers (for consumers having a load above 20 kW) from Rs. 150 per kVA to Rs. 300 per kVA per month. Further, it has also proposed to increase the Fixed Charges of LT Industrial consumers upto 20 kW from Rs. 150 to Rs. 220 per connection per month and from Rs. 100 to Rs. 200 per kVA per month for consumers above 20 kW.

MSEDCL submitted that there are many categories where load shedding is not applicable and load shedding has been reducing over the years. MSEDCL has quoted the following rulings of the Commission in Case No. 72 of 2007 and Case No. 111 of 2009 respectively.

**Order in Case No. 72 of 2007:** “.....As and when sufficient power is available and contracted by the licensees, the Fixed Charges can again be increased, and Energy Charges reduced correspondingly.”

**Order in Case No. 111 of 2009:** “.... once sufficient power is available and contracted by the licensees, the Fixed/ Demand Charges can again be increased, and Energy Charges reduced correspondingly.”

### **Commission's Ruling:**

The Commission has noted that the supply availability from MSEDCL has increased substantially, indicated by the high rate of growth of sales of 14% for the first ten months of FY 2011-12. The Commission, in previous Orders, had not allowed for an increase in Fixed Charges due to high power deficit in MSEDCL license area.

Many consumers have strongly opposed the proposition of MSEDCL to increase Fixed/ Demand Charges. However, it should be noted that not increasing the fixed Tariffs will not result in retaining the current Tariffs. The approved expenses of

MSEDCL need to be recovered from Tariff, either by the way of Fixed Charges or by the way of Energy Charges or both. Therefore, not increasing the Fixed Charges will result in an equivalent impact on Energy Charges.

Also, with regard to the levy of Fixed Charges / Demand Charges, the Commission has explained the rationale for the same in previous Tariff Orders. The same is also in accordance with the EA 2003 and the Tariff Policy notified by the Ministry of Power, Government of India. Levy of fixed charges and demand charges neither result in any windfall gain to the licensees, since they are recovering only a part of the fixed costs through levy of fixed charges, nor does it result in any Tariff shock to the consumers, since Fixed/ Demand Charges typically contribute only a small part of the total monthly bill of the consumer. It is for the consumer to assess his demand correctly and accordingly contract for the demand with the licensee, in order to rationalize the demand charges being levied.

However, notwithstanding the increased power availability, Maharashtra is still facing energy deficit to the extent of 16.7% (FY 2011-12) as per CEA. As indicated by the Commission, in the section covering analysis of MSEDCL's proposed power purchase plan for FY 2012-13, the scenario of improved power availability is not as optimistic as projected by MSEDCL. Therefore, the Commission, in this Order is allowing a partial increase in Fixed Charges i.e. approximately 25% increase for all categories, but not to the extent prayed by MSEDCL for most categories.

## **8.5 Increase in ToD rebate for off-peak consumption**

### **MSEDCL's submission:**

MSEDCL submitted that for the economic growth of Maharashtra, it is essential to support industries in the State to be more competitive within the domestic and global open market. However, electricity plays an important role as a cost factor for the industries to make their product or services more competitive.

Considering the economic growth of the State and also the power supply available with MSEDCL, it submitted that it is necessary to have a balanced proposal which is in the interest of MSEDCL, the State as well as industries. Therefore, MSEDCL has proposed that there will be no change in prevailing incentives / rebates / penalties, except that the rebate in Energy Charge available to HT and LT Industrial consumers has been proposed to increase substantially from existing level of 85 paise per unit to 250 paise per unit, which will be applicable for consumption during night hours (10.00 p.m. to 06.00 a.m. next day). MSEDCL submitted that this will help the industries to consume low cost power during the off-peak period resulting in competitive product and services.

### **Commission's Ruling:**

The Commission notes that MSEDCL has proposed to increase the rebate for off-peak consumption from 85 paise to 250 paise so as to enable industries to consume

power in off-peak period at lower Tariffs and thus provide them a competitive advantage to lower the cost of production by shifting their load from peak period to off-peak period. The increase in ToD rebate for off-peak consumption is a positive step towards demand side management. The Commission is also keen to take proactive measures to design Tariffs so as to enable optimum use of capacity available. However, the Commission is of the view that the intended purpose of designing ToD Tariff in respect of high load consumers to spread the demand across different time slots of the day has largely been achieved over the last few years. Therefore, the enhancement in rebate proposed by MSEDCL in the night slot of ToD Tariff is too high and may end up reducing the effective Tariff for industries more than materially affecting further load shift into the night hours. On the contrary, a very high rebate in the night Tariff will considerably increase the Energy Charges during the other times of the day. It will also adversely affect other categories of consumers who are not eligible for ToD Tariff. A gradual change is required to move towards the smart grid concept rather than a drastic change in ToD Tariffs which may result into Tariff shocks for other categories. The Commission has approved a moderate increase in the ToD rebate for off-peak consumption (i.e. 2200 hours to 0600 hours) from 85 paise to 100 paise.

## **8.6 Billing demand during off-peak period**

### **MSEDCL's submission:**

MSEDCL submitted that as per prevailing provisions, the demand recorded by a HT consumer during night hours is ignored for billing purpose, even though the same exceeds the consumer's Contract Demand. Further such consumer, who has exceeded his Contract Demand during night hours, is otherwise considered as eligible for Load Factor Incentive. MSEDCL submitted that it has observed that the consumers are taking undue advantage of such provision and are getting benefited by paying marginal penalty for exceeding Contract Demand against enjoying substantial quantum of Load Factor Incentive.

In the present Petition, MSEDCL has proposed to enhance the off peak consumption rebate (limited to High Tension Industrial consumers only) to 250 paise per unit from existing 85 paise per unit. MSEDCL submitted that it is expected that every HT industrial consumer would attempt to get maximum benefit of the proposed provision. In case the present provision of "Billing Demand" is continued as it is, then the HT industrial consumer may be tempted to purposely exceed his Contract Demand during night hours to ensure maximum consumption during night hours and in the process will be benefited in Load Factor Incentive to. In view of this situation, MSEDCL has proposed that the Commission may consider modifying the present provision in respect of "Billing Demand" so that the demand recorded during off peak hours also needs to be considered for billing purpose. Similarly such consumers who have exceeded Contract Demand during night hours should also not be considered as eligible for "Load Factor Incentive".



**Commission's Ruling:**

The concept of off-peak rebate is to utilise the idle capacity that should be available in the off-peak period due to lower demand from residential and commercial category of consumers. The Tariff of such consumption in off-peak period should ideally be slightly higher than the variable cost of production so as to cover some part of the fixed costs and entire variable cost. It is in the utility's interest that the industrial consumers are utilising the available, already contracted capacity of the utility which is not being otherwise utilised. Therefore, the Commission finds it reasonable that such optimum utilisation of capacity by exceeding the contract demand is not being billed to the consumer in terms of additional Fixed Charges and hence the current definition of billing demand is retained in this Order.

However, the MSEDCL's plea that the consumer is getting undue advantage on Load Factor Incentive needs some discussion. The issue of utilization of capacity will gain more importance as MSEDCL moves towards a zero-load shedding scenario. As per MSEDCL's plea, some consumers are getting undue advantage on Load Factor Incentive by consuming more energy in the off-peak period and thus "levelling" their lower utilisation of contracted load during the day time. While this is not entirely incorrect, the other aspect of this issue is that such lower utilisation of capacity by these industrial consumers in day time helps the utility meet peaking demand of commercial load in day time. Considering these aspects, the Commission is keeping the definition of Load Factor Incentive unchanged in this Order. However, the Commission directs MSEDCL to submit data on load factor during the day time (0600 hours to 2200 hours) and during the off-peak hours (2200 hours to 0600 hours) for all such consumers who have availed Load Factor Incentive for FY 2010-11 and FY 2011-12 in the Petition for Truing up of FY 2011-12. The Commission may consider the issue further after examining the above data submitted by MSEDCL.

**8.7 Reduction/ Enhancement in contract demand by minimum 25%****MSEDCL's submission:**

MSEDCL submitted that the following provisions are prevailing in the State for Billing Demand for all HT categories (except HT II Seasonal category) as per the Tariff Order dated 12 September, 2010:

*Monthly Billing Demand will be the higher of the following:*

- i. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours*
- ii. 75% of the highest billing demand recorded during preceding eleven months*
- iii. 50% of the Contract Demand.*

**Note:**

*-Demand registered during the period 0600 to 2200 hrs will only be considered for determination of Billing Demand.*

*-In case of change in Contract Demand the period specified in clause (i) above will be reckoned from the month following the month in which the change of Contract Demand takes place.*

MSEDCL submitted that it found that many consumers are misusing these provisions by reducing the Contract Demand by just a few kVA. Due to change in contract demand, the billing MD, instead of 75 % of 11 months maximum demand becomes 50% of contract demand resulting in huge loss of revenue from Fixed Charges to MSEDCL.

MSEDCL has therefore requested the Commission to impose minimum 25% limit for change in contract demand for the applicability of the current provisions regarding Billing Demand and make following amendment in the provision.

*“In case of change in Contract Demand by at least 25%, the period specified in clause above will be reckoned from the month following the month in which the change of Contract Demand takes place.”*

**Commission’s Ruling:**

The Commission acknowledges MSEDCL's concern regarding misuse of the definition of billing demand to avail the benefit of lower Fixed Charges. The definition of billing demand was conceptualised to give the benefit of charging of Fixed Charges on lower contracted load to consumers who have reduced the contract demand. As per MSEDCL's plea, some consumers are misusing this provision to avail benefit of lower Fixed Charges by making small changes in the contract demand.

However, a minimum change of 25% in contract demand for applicability of this principle in billing demand as suggested by MSEDCL would deprive genuine consumers from this benefit of lower contract demand, who wish to change their load, say by 15-20%, which is not insignificant. Also, consumers who are implementing Demand Side Management measures will only be able to reduce their demand marginally. Some industrial consumers had pointed out during the public hearing that if MSEDCL’s proposal was accepted, then they will be deprived of the opportunity of optimising their demand charges, which forms a substantial portion of their electricity bills and input costs. If these consumers do not find any benefit through a reduced contract demand charges, they may not initiate such initiatives which are important for overall benefit of the sector. The Commission is also of the view that MSEDCL is not really materially affected by reduction in revenue from Demand Charges due to consumers changing their contract demand marginally. It will be prudent for MSEDCL to present before the Commission all the data, with documentary evidence, to demonstrate that such changes in contract demand by the consumers are really impacting their revenue substantially. Also, MSEDCL may present a different definition of Billing Demand

which could be a win-win for both MSEDCL and the consumers. At present, the Commission is not convinced that there is a need to change the definition of Billing Demand as proposed by MSEDCL. Hence, the Commission has not accepted this proposal of MSEDCL.

## **8.8 Tariff for small shops operated from home**

### **MSEDCL's submission:**

MSEDCL has proposed that mixed load consumers, who are situated in Gram Panchayat areas only and running small household businesses, can be granted preferential LT-I Tariff without installation of separate meter subject to monthly usage of electricity is limited within 100 units. In case such consumer exceeds the limit of consumption of maximum 100 units per month, then after third such occasion, the consumer will be treated as a commercial consumer and will be billed with commercial Tariff subsequently.

### **Commission's Ruling:**

Many consumers and consumer representatives have suggested accepting this proposal with the modification that the upper limit for shifting to commercial category for such consumers should be 300 units instead of 100 units. The consumers have also suggested including such consumers in residential category in entire license area of MSEDCL instead of only those consumers which are located in gram panchayats.

The Commission agrees with MSEDCL's submission that consumers running small businesses from households may be provided relief from high Tariffs of Commercial categories, since this will cause a large impact on their livelihood. Taking into account the various suggestions from consumers, the Commission is of the view that for consumers who consume less than 300 units a month need not be subject to different tariffs. Hence, the Commission has decided that categories of consumers who consume less than 300 units a month would be applied the tariff of LT-I (Domestic), subject to conditions laid down in the Tariff schedule.

## **8.9 Energy Charges for Domestic /Agriculture Consumers**

### **MSEDCL's submission:**

MSEDCL submitted that in order to achieve the objective of the Tariff Policy that the Tariff progressively reflects the efficient and prudent cost of supply of electricity, there is a requirement that Tariffs of consumers have a direct linkage to cost of service. As a first step towards having a Tariff within  $\pm 20\%$  of the average cost of supply, MSEDCL has proposed that the Energy Charge payable by domestic consumers in the Tariff slab of zero to hundred unit per month may be increased from 282 paise per unit to 390 paise per unit which is less by 10% than the landed cost of power purchase.

Similarly the Energy Charge payable by the metered Agriculture consumers has been proposed to be increased from 176 paise per unit to 240 paise per unit. MSEDCL submitted that this will be considered an initiative by it to rationalise the Tariff in line with the objective of the Tariff Policy.

**Commission's Ruling:**

Approximately 75% of total consumers of MSEDCL fall in LT Domestic category. The proposed Tariff increase for domestic consumers in the Tariff slab of 0-100 units is 38%, which is very steep. Although, the Commission also believes that the Tariffs should be indicative of cost of supply, increasing Tariffs significantly of any category would result into a Tariff shock to that category. The provision in the Tariff Policy regarding this issue is quoted below.

*"5.5.3 Over the last few decades cross-subsidies have increased to unsustainable levels. Cross-subsidies hide inefficiencies and losses in operations. There is urgent need to correct this imbalance **without giving Tariff shock to consumers.** The existing cross-subsidies for other categories of consumers would need to be reduced progressively and gradually." (Emphasis added)*

The Commission observes that the domestic category on overall basis has a cross-subsidy of only 13-14%. However, the cross-subsidisation for the consumers in the Tariff slab of 0-100 is higher. The Commission has approved a marginal increase in Tariff for consumers under this category, but not to the extent of 38% as proposed by MSEDCL.

Regarding Agriculture category also, the Commission has considered a marginally higher increase as compared to the average increase. The Commission has decided to increase the Tariff for unmetered agriculture consumers higher than that for metered category, so as discourage consumers from availing unmetered supply.

**8.10 Subcategory in HT and LT Commercial**

**MSEDCL's submission:**

MSEDCL has proposed to introduce a new consumer sub-category within Low Tension / High Tension Non-domestic (Commercial) category consisting all Government owned, managed and operated educational institutions including higher educational institutes (viz., Zilla Parishad/Municipal Council or Corporation Schools, Govt. Medical/Engineering Colleges, etc.) but excluding Government aided educational institutes. Similar approach has been proposed for Government owned, managed and operated hospitals (viz., District Civil Hospitals, Primary Health Centre etc.).

MSEDCL submitted that the data pertaining to this category of consumers is currently not available separately and need not be a precondition for carving out a new sub-category so as to address the practical issue at hand. Since, the data on the same is not available, the revenue calculation for these categories has not been

shown. However, MSEDCL submitted that on being granted approval for sub-categories as proposed and identifying the consumers of these categories, the revenue calculation shall be shown in subsequent Tariff filings.

MSEDCL submitted that the Hon'ble ATE in its Judgment dated October 20, 2011 (Appeal No. 110,111,170,171,201 & 202 of 2009) & Appeal No. 70, 71, 78,79,80,81 & 82 of 2010 in the matter of Association of Hospitals, Educational Institutes & Others and the Commission passed its judgment that the purpose for which the supply is required by the aforesaid categories cannot be equated at par with other consumer categories in the Commercial Category as was the case. The Hon'ble ATE further avers that the re-categorization of the Charitable Hospitals and Charitable Organizations and grouping them with other consumers of the Category is patently wrong. MSEDCL further stated that:

*“Further, the ATE in its judgment also mentioned that such classification by the Hon'ble Commission was done on the grounds that the appellants were neither under industrial, agricultural nor residential category which is not the correct approach. As such, the Hon'ble Tribunal directed that Hon'ble Commission may classify the hospitals; educational institutions and spiritual organisations which are service oriented and put them in a separate category for the purpose of determination of Tariff. Thus, it is proposed by MSEDCL to introduce a separate category for Govt. aided Educational Institutes and Hospitals.”*

MSEDCL further proposed that Tariff for such consumers shall be at par with the current level of Average Cost of Supply. In addition, it has also proposed that educational institutes and hospitals other than the Government owned educational institutes and hospitals shall not be subjected to any Tariff hike, which inter – alia mean that the Tariff applicable to such Educational Institutions & Hospitals shall not be increased.

#### **Commission's Ruling:**

In the public hearings, some of the consumers/consumer representatives have objected that a lower Tariff by way of a new category should not be allowed to Government owned agencies as these are generally defaulting consumers. The Commission would like to clarify that maintaining high collection efficiency is a responsibility of MSEDCL. If MSEDCL has not been able to collect its dues from certain agencies, the same should not deprive needy consumers from availing power at reasonable Tariffs. Some consumers have also suggested that the Commission should decrease the number of consumer categories for simplification of Tariff Schedule.

In this context the Commission is fortified by the Judgement of the Hon'ble ATE dated 20 October, 2011, in Appeal No.110,111,170,171,201 & 202 of 2009 and 70,71,78,79,80,81 & 82 of 2010, in which the Tribunal ruled as under:

*“57. Summary of Our Findings*

(i) *The State Commission in the present case wrongly placed all the consumers including the Appellants who were neither domestic nor industrial nor falling under any of the categories under the Commercial Category. The purpose for which the supply is required by the Appellants can not be equated at par with other consumers in the Commercial Category. The Appellants are seeking separate categorisation on the basis of purpose for which the supply is required by the Appellants i.e. rendering essential services.*

(ii) *The real meaning of expression ‘ ‘purpose for which the supply is required’ ’ as used in Section 62 (3) of the Act does not merely relate to the nature of the activity carried out by a consumer but has to be necessarily determined from the objects sought to be achieved through such activity. The Railways and Delhi Metro Rail Corporation have been differentiated as separate category as they are providing essential services. The same would apply to the Appellants as well.*

(iii) *The application of mind should be on identifying the categories of the consumers who should be subjected to bear the excess Tariff recoverable based on a valid reason and justification. The re-categorisation of Charitable Hospitals and Charitable Organisations and grouping them with the consumers of the category such as Shopping Malls, Multiplexes, Cinema Theatres, Hotels and other like commercial entities is patently wrong.*

(iv) *By the impugned order, the State Commission classified the members of the Appellants into ‘Commercial’ category following a mechanical approach. This has been done only because the Appellants cannot fall under either in the industrial or agricultural or residential category and therefore, the Appellant would automatically fall in the Commercial Category. This is not a proper approach. In case the State commission felt that the Appellants are not falling under any particular existing category, then the State Commission ought to have applied its mind and provided for a new category and given them a competitive Tariff having regard to the purpose for which the electricity is used by them.*

(v) *The State Commission may classify the hospitals, educational institutions and spiritual organisations which are service oriented and put them in a separate category for the purpose of determination of Tariff.*

(vi) *We feel that the re-categorisation should be implemented by the State Commission in the next Tariff Order which is yet to be passed for the following reasons:*

*(i) FY 2008-09 and FY 2009-10 are already over and Tariff has been collected by the Distribution Licensees as per the respective Tariff Orders.*

*(ii) The Hon'ble Supreme Court has granted stay on some of the judgements issued by this Tribunal for the FY 2008-09 in similar matters.*

*(iii) The Tariff shock and increase in cross subsidy for FY 2009-10 for the above consumer categories will depend on the outcome of the above Appeals pending before the Hon'ble Supreme Court for Tariff for FY 2008-09. “*

As per the ruling mentioned above, it is imperative that the Commission create new a category based on the “purpose of use” of electricity under the provisions of the Section 62 of the EA, 2003. Therefore, as against MSEDCL's proposal of creation of a separate category for Government owned, managed and operated hospitals and educational institutes, the Commission has decided to introduce a new category called "Public Services". This consumer category is applicable to entities which are essentially providing public services. The Commission has designed the Tariff for this category in a manner so that the average billing rate for this category is higher than the average cost of supply, but below that of the Commercial category.

### **8.11 Additional consumption slab in LT Commercial**

#### **MSEDCL's submission:**

MSEDCL has proposed to create a new consumption slab in Low Tension Non-domestic category of consumers (up to 20 kW Connected Load) having consumption above 500 units per month and accordingly the proposed Tariff slabs in LT non-domestic consumer category would be (i) Zero to 200 units, (ii) 200 to 500 units, and (iii) above 500 units.

MSEDCL submitted that out of total power procured, some power is procured at lower rate for catering to base load and some power is procured at high rate for catering to peak demand. MSEDCL submitted that it feels that the Energy Charges for consumers with high consumption should reflect the cost of expensive power purchase. Also by proposing higher Tariff for greater than 500 units consumption slab, MSEDCL submitted that it is indirectly giving a message to other Commercial consumers which will eventually help to encourage reduction in electricity consumption by such consumers to some extent.

#### **Commission's Ruling:**

The rationale given by MSEDCL for a higher Tariff for the slab for consumption of greater than 500 units per month needs to be evaluated. It is implied in MSEDCL's submission that the units consumed in the above mentioned slab are required to be paid at a higher rate. The Commission is of the view that the consumers who are regularly consuming more than 500 units do not contribute to an unexpected peaking demand. Marginal power procurement cost is higher only because it is generally unplanned power. Moreover, the ABR for LT Commercial category is one of the highest payable by any consumer category. By accepting this proposal, establishments like offices, showrooms, etc will be penalised for consuming power according to their normal consumption pattern. Therefore, the Commission does not approve the proposed new slab under the LT-II category.

### **8.12 Fuel Adjustment Cost (FAC)**

#### **MSEDCL's submission:**

MSEDCL has proposed to remove ceiling of 10% on FAC recovery so as to ensure that the full eligible amount of increase in power purchase cost is recovered through FAC without any ceiling thereon.

**Commission's Ruling:**

The Commission has already initiated a process whereby, it has sought suggestions/ objections from the public regarding the proposal to increase the FAC recovery ceiling to 25%. A copy of the same is available on the Commission's website (<http://www.mercindia.org.in>). The draft Order in the matter of "Stipulation of Revised Ceiling for Levy of Fuel Adjustment Cost (FAC) by Distribution Licensees in the State of Maharashtra under Regulation 82 of the Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005" is also available on the Commission's website.

This draft Order was issued on July 6, 2012 to invite suggestions and objections from all stakeholders including Distribution Licensees, consumers of all Distribution Licensees, etc. The Commission shall finalize the Order after taking a view on the submissions received from the stakeholders on the draft Order. Therefore, in the present Order, the Commission has not dealt with this issue separately.

**8.13 Tariff based on actual circle wise distribution losses**

**MSEDCL's submission:**

During the public hearing for the Final Truing up of FY 2009-10 and Annual Performance Review of FY 2010-11 (Case No. 100 of 2011), one of the objectors had suggested that MSEDCL should provide incentives to consumers in the circles, where losses are lower as compared to targets, by giving benefit based on efficiency.

The Commission, vide Order dated 30 December, 2011 in the matter of Final Truing up of FY 2009-10 and Annual Performance Review of FY 2010-11 (Case No. 100 of 2011), ruled that.

*"The present case is not a Tariff determination exercise for MSEDCL. The present case is in the matter of MSEDCL's Petition for Truing up of FY 2009-10, and APR of FY 2010-11. Therefore, the issue raised by the objector cannot be addressed in these proceedings. However, the Commission directs MSEDCL to address this issue in its next Tariff Petition."*

MSEDCL submitted that the distribution losses in a particular geographical area depend on various factors, like consumer mix, HT: LT Ratio, status of infrastructure, voltage level of power supply, etc. Further, it said that it would be difficult to pass on the benefits to the consumers situated in Circles having lower losses than the State's average distribution loss and comparison of distribution loss level of different Circles vis-à-vis State's average distribution loss, may not be



appropriate and may therefore not be insisted for. Hence MSEDCL has not proposed Tariff or any incentives based on actual circle wise distribution losses.

**Commission's Ruling:**

There is no ambiguity in the fact that current mechanism of ARR and Tariff design leads to "socialisation" of the Distribution losses across all the consumers of the licensee. The consumers in circles with lower distribution losses have to pay higher Tariffs for unauthorised consumption in Circles with higher distribution losses. However, it should also be taken in view that all consumers in the circles with higher distribution losses do not indulge in unauthorised consumption. Therefore, implementing a hefty penalty for all consumers in circles with higher distribution loss, either by way of direct penalty on consumers of circles with high distribution loss or by way of rebate on consumers of circles with lower distribution loss, is also incorrect. Having said this, it is also important to send a signal to the consumers that unauthorised consumption cannot be tolerated. However, the Commission, at this stage does not have sufficient data to implement the distribution loss surcharge/incentive and has issued a directive to MSEDCL to submit the required information in the next Tariff Petition.

**8.14 Voltage level Tariff**

**MSEDCL's submission:**

MSEDCL submitted that EA 2003 mandates for unified distribution licensee and not separate licensees for wires and supply business. Amendment to the Act as well as Distribution Licenses, necessary regulatory framework and technical improvement is required to be in place in order to segregate wires and supply business. MSEDCL mentioned that it is presently using an old accounts system and the new software systems are under implementation; hence retrieving old information would be very difficult. MSEDCL submitted that such segregation / separation will involve a lot of manpower, which would mean that the utility would have to incur additional employee expenses. Further, certain segments of business cannot be segregated into both of the two business category e.g. Sub-station which caters to both distribution and supply business.

MSEDCL further submitted that such segregation involves a lot of manpower & study of the books of accounts as all the expenses have been booked in separate account code. MSEDCL said that a detailed analysis needs to be done in order to arrive at the expenses based on the nature of the business and also submitted that certain segments of business cannot be segregated in to either business category viz Sub-station which caters to both distribution and supply business, so voltage wise segregation would not be possible as all the expenses are booked under the same account head.

MSEDCL added that the expenditure in respect of consumer with normal meters and paying bills in advance cannot be avoided & therefore such consumers cannot

be considered for 5% rebate. A consumer, who pays in advance against his energy bill, is entitled to interest (on reducing balance) as per the rate of interest applicable on Security Deposit.

**Commission's Ruling:**

Incurrence of effort and cost should not be a deterrent to have Tariffs which are based on the cost to serve. Moreover, the segregation of wires and supply cost may involve a larger effort in the first year for segregation. Once the segregation is done for the first year and correct procedures are adopted for accounting of cost into wires and supply business, there should not be much incremental effort in the future years.

Being an integrated company, there will always be some expenses which would be shared by wires and supply businesses. For example, the top management of the company would be the same for both wires and supply business. Such expenses can be apportioned based on revenue earned by wires and supply business.

MSEDCL is directed to segregate the accounts for wires and supply business from FY 2012-13 onwards. Any major deterrents regarding the same should be brought to the notice of the Commission within two months for the date of issue of this order.

MSEDCL is also directed to submit a report on Cost of Service for each category for FY 2011-12 within 120 days from the date of issue of this order.

During the proceedings of public hearing the Commission came across requests from EHV consumers that they must have a lower Tariff compared to the Tariff generally applicable for HT Industrial consumers, as they impose much lower losses on the system due to their supply is connected from EHV network of MSETCL rather than the distribution wires of MSEDCL, though they are consumers of MSEDCL. In this respect, the Hon'ble ATE in its recent Judgement dated 26 July, 2012 in Appeal No. 13 of 2010, Appeal No. 198 of 2010 and Appeal No. 42 of 2011, noted as below:

*“New categorization for EHV consumers: The State Commission shall consider creation of separate category for EHV consumers in future Tariff Order after determination of voltage-wise cost of supply and decide the matter after hearing all concerned keeping in view the provisions of Sections 61(g) and 62(3) of the Act and Tariff Policy.”*

The Commission was already in the process of determination of Tariff for MSEDCL, and the Judgement was issued at a time when considerable progress in the proceedings of the case for Tariff determination has been made. Considering that consumption by EHV consumers may be significant, the Commission found that creation of a separate category entirely for EHV consumers may not be appropriate at this stage. **However, MSEDCL is directed to account for and provide all data in respect of consumption of EHV consumers when it submits its next Tariff application before the Commission.** At present the Commission

has allowed a rebate of 3% on Energy Charges to all consumers taking supply at EHV level, i.e. at voltages of 66 kV and above.

### **8.15 Infrastructure charge for consumers in Nagpur**

#### **MSEDCL's submission:**

MSEDCL has requested the Commission to Permit recovery of 50% of the actual capital expenditure that would be incurred for executing the work of shifting of electric poles / lines presently causing obstacle to vehicular traffic in the city of Nagpur from the consumers situated within geographical jurisdiction of Nagpur Municipal Corporation, i. e. consumers from the O & M Divisions of MSEDCL at Mahal, Gandhibaug, Congress Nagar & Civil Lines under Nagpur Urban Circle at the rate of 29 paise per unit over a period of twelve (12) months by way of "Infrastructure Charge"

#### **Commission's Ruling:**

MSEDCL had filed a Petition (Case No. 172 of 2011) before the Commission proposing to recover from the consumers situated within geographical jurisdiction of Nagpur Municipal Corporation expenditure being incurred for shifting of poles / overhead wires, which are presently posing hardship to pedestrian as well as vehicular traffic in the city of Nagpur.

MSEDCL proposed that the capital expenditure that may be incurred for this purpose needs to be recovered from the consumers situated within the geographical jurisdiction of Nagpur Municipal Council, since such expenditure would neither be useful for strengthening of the system nor for reducing distribution losses. Accordingly, MSEDCL proposed to recover Rs.130 per consumer from all concerned consumers in coming six months. MSEDCL had submitted that this is a venture to beautify the city rather than any technical need. In such a situation it is fully recoverable from consumers who want such beautification. Accordingly, in the said Petition (Case No. 172 of 2011), MSEDCL had inter-alia prayed for as follows:

*"a) Permit the Applicant Company to recover 50% of the actual capital expenditure that would be incurred for executing the work from the consumers situated within geographical jurisdiction of Nagpur Municipal Corporation, i. e. the consumers from the O & M Divisions of MSEDCL at Mahal, Gandhibaug, Congress Nagar & Civil Lines under Nagpur Urban Circle at the rate of Rs. 130 per month per consumer (tentatively) over a period of six months by way of "Infrastructure Charge";and*

*b) Permit the Applicant Company to follow similar policy in other areas also wherever the Local Body and / or the consumers request the Applicant Company for shifting of electric poles and conversion of Low Tension / High Tension Overhead Distribution Network into Underground."*

The Commission vide Order dated 15 February, 2012 directed MSEDCL to project similar issues that may arise in other parts of Maharashtra and propose treatment of recovery of such expenditure in the Aggregate Revenue Requirement for FY 2012-13 Petition for public consultation.

The Commission is of the view that consumers of the areas in which such shifting of poles is taking place are the ultimate beneficiaries of the capital expenditure incurred on shifting of poles as the direct benefits of beautification and wider roads accrues to the residents of the identified areas. Thus the Commission has accepted MSEDCL's proposal to impose an additional charge for consumers of the identified areas. However, an additional charge of 29 paise per unit in addition to the tariff hike allowed by the Commission can lead to a tariff shock to the consumers of the identified area. Hence the Commission has decided to allow MSEDCL to collect an additional charge of 9 paise per unit of consumption from the consumers in the O & M Divisions of MSEDCL at Mahal, Gandhibaug, Congress Nagar & Civil Lines under Nagpur Urban Circle. As per Commission's analysis, MSEDCL shall be able to recover the entire cost of Rs. 45 crore within the next three years based on the per unit charge of 9 paise per unit of consumption. However, MSEDCL shall maintain a monthly progressive account to monitor the collection from this additional charge so that its collection does not exceed the estimated amount of Rs. 45 crore. Once the entire amount is recovered, MSEDCL must submit an audited report in this respect to enable the Commission to verify the actual collection in this respect.

#### **8.16 Commission's Tariff Philosophy**

In this Order, the Commission has reduced the cross-subsidy prevailing between consumer categories, over that prevailing in the previous year.

As discussed earlier in this Section of this Order, the Commission has determined the total revenue requirement to be recovered through the Tariff of FY 2012-13 as Rs. 48,926 crore, which indicates that there is a need to increase the Tariffs by around 16.48%.

The Commission has determined the Tariffs in broadly 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.

#### **8.17 Rationalisation of Tariff Categories**

As enunciated in earlier Tariff Orders, while undertaking the rationalisation of Tariff of different categories, the Commission has borne in mind the provisions of Section 62(3) of the Electricity Act, 2003, which stipulates as under:

*"The Appropriate Commission shall not, while determining the Tariff under this Act, show undue preference to any consumer of electricity but may differentiate*

*according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."*

It should be noted that it is not possible to apply all the above specified criteria at the same time, for designing the Tariff categories; else, with many permutations and combinations, there will be too many categories. Perhaps, that is also not the intention behind the provision, which merely enables Regulators to work within the criteria.

Thus, it will be seen from the elucidation given below, as to how different criteria have been used to categorise different types of consumers:

- The 'load factor' and 'power factor' criteria have been used to provide rebates and disincentives, such as Load Factor Incentive for load factor above certain specified levels, and power factor rebates and disincentives are provided to consumers who are able to maintain their power factor above specified levels.
- The consumer categories are broadly classified under High Tension (HT) and Low Tension (LT) categories, in accordance with the 'voltage' criteria under Section 62(3) reproduced above.
- The 'time of supply' criteria has been used to specify time of day (ToD) Tariffs, so that the consumers are incentivised to shift their consumption to off-peak periods and thus, reduce the burden on the system during peak hours.
- The 'nature' of supply criteria has been used to specify differential Tariff for continuous (non-interruptible) and non-continuous supply (interruptible)
- The criteria of 'purpose' of supply has been used extensively to differentiate between consumer categories, with categories such as residential, non-residential/commercial purposes, industrial purpose, agricultural purpose, street lighting purpose, public service purpose, etc.

As discussed in paragraph 8.10, MSEDCL has proposed a new sub-category in LT-II and HT-II Commercial categories for Government owned hospitals and educational institutes. While not approving this proposal, the Commission has decided to introduce a new category called "Public Services", both in LT and in HT class of categories. The categories of LT II(A) and LT II (B) as proposed by MSEDCL will be merged in LT in "LT Public Services" and the categories of HT II (A) and HT II (B) will be merged in "HT Public Services". The detailed applicability of the categories has been dealt with in the Tariff Schedule. This category will have three sub-categories which are as follows:

- 0-20 kW Sanctioned load
  - Slab-1: 0-200 kWh
  - Slab-2: >200 kWh
- 20-50 kW sanctioned load

- >50 kW sanctioned load

The Tariff for this category has been designed in such a way that the Tariff will be lower than or equal to what has been proposed by the licensee after considering the existing applicability and increase required for FY 2012-13. For the 0-200 units slab in 0-20 kW category, the ABR will be approximately equal to the Average Cost of Supply. For the other slab in this sub-category (i.e. >200 units in 0-210 kW sub-category and for the other sub-categories 20-50 kW and >50 kW, the Tariff has been designed to ensure that the ABR is between that of industrial and commercial category.

As discussed in paragraph 8.8, the consumers operating small businesses from their households, in rural as well as urban areas, having total consumption less than 300 kWh per month will be billed under LT-I Residential category and no separate meter will be required for billing their consumption of business under any other category.

The Commission has also considered an additional sub-category under HT-VIII (Temporary) for temporary supply for religious purposes as proposed by MSEDCL. The tariff for this category would be the same as that of LT-VII (A) – Temporary supply Religious.

MSEDCL, has proposed in its Petition several changes in the Tariff applicability, most of which are of the nature of clarification of applicability in existing categories. Majority of the changes, which are of nature of clarification have been accepted by the Commission and have been dealt with by the Commission directly in the Tariff Schedule. Certain other changes in applicability proposed by MSEDCL, which may have significant effect on applicability and for which clarification is required are elaborated below:

<b>Consumer type</b>	<b>Existing</b>	<b>Proposed by MSEDCL</b>	<b>Commission's Ruling</b>
Fire Service Stations/Jails and Prisons	Not clarified	LT-I Residential	Included in the newly created Public services category
Public Libraries and Reading Rooms	Not clarified	LT-II (A) (iii) Commercial - Others	Public Libraries and Public Reading Rooms included in Public Services category as these are of the nature of public good

<b>Consumer type</b>	<b>Existing</b>	<b>Proposed by MSEDCL</b>	<b>Commission's Ruling</b>
Aquaculture, Sericulture, Fisheries, Cattle Breeding Farms	Not clarified	LT-II (A) (iii) Commercial - Others	Aquaculture, Sericulture, Fisheries and Cattle Breeding Farms have been included in the commercial category, as the purpose of use of electricity for these activities are commercial in nature
Cold Storage	Agriculture	Agriculture; However MSEDCL has proposed to restrict the definition for purpose of billing under Agriculture category to pre-cooling plants and cold storage units used only for storing perishable agriculture produce and its natural form	The Commission has not accepted the restrictive definition proposed by MSEDCL in view that such definition will create subjectivity.
Hatchery	Not clarified	Agriculture - Poultry	The proposal of MSEDCL is accepted as the nature of activity is related to the poultry business
Floriculture, Horticulture, Nurseries, Plantations	Not clarified	Agriculture	The proposal of MSEDCL is accepted as the nature of activity is of the nature of agriculture
Street Light	No bifurcation	Street Light Services owned, operated and maintained by an authority/agency other than Local Self Government body have been excluded from this category and it has been proposed to bill such consumers under LT-II Commercial category	The Commission has accepted the proposal of MSEDCL in this regard; as there may be commercial motive if it is not completely under the ownership, operation and maintenance of the local self Government.

Consumer type	Existing	Proposed by MSEDCL	Commission's Ruling
PWW	No bifurcation	Public Water Supply Schemes and Sewage Treatment Plants (including other allied activities) owned, operated and managed by any other Agency other than Local Self Government Body (excluding Maharashtra Jeevan Pradhikaran) shall not be eligible for LT III tariff	The Commission has accepted the proposal of MSEDCL in this regard; as there may be commercial motive if it is not completely under the ownership, operation and maintenance of the local self Government.

MSEDCL has expressly mentioned in the proposed Tariff applicability that ancillary services within industrial/hospital/education institutes/residential colonies, which are exclusively meant for the employees/patients/students/residents of these establishments respectively and cannot be availed by any external person, shall be billed under the consumer category of the respective categories itself instead of billing them under the Commercial category. This proposal of MSEDCL is accepted as it is in line with the views expressed by the Commission in the previous Tariff Order in Case No. 111 of 2009.

While appreciating the anxiety of different classes of consumers to reduce their payments on account of the use of electricity, the reasonable costs incurred by the utilities have to be met, and irrespective of the number of consumer categories or the sub-classification considered in accordance with the provisions of Section 62(3) of the EA 2003, the cross-subsidies have to be reduced gradually and the Tariff differential between categories cannot be very significant in the long-run.

It should be noted that all previous clarifications given by the Commission through its various Orders continue to be applicable, unless they are specifically contrary to anything that has been stated in this Order, wherein the clarifications given in this Order shall prevail.

Individual residential consumers taking supply at HT voltage (large bungalows) will be charged at LT residential rates, since there is no HT residential Tariff category. Further, 'HT VI Group Housing Society' Tariff is also applicable for such Housing Colonies of industrial consumers or educational institutions, taking supply at HT with separate sub-meter, irrespective of whether metering is at HT side or LT side of the transformer so long as the supply is at HT voltage.

Similarly, for commercial load of industrial consumers or educational institutions taking supply at HT voltage with separate sub-meter, the HT II Commercial category Tariff will be applicable, irrespective of whether metering is at HT side or LT side of the transformer. The HT VI Commercial category Tariff will not be applicable in such cases, since the same is intended to be only an interim solution,



since all such commercial category consumers taking supply at single point have to be converted either to franchisee or individual connections, in accordance with the detailed rationale given by the Commission in previous Tariff Orders.

Electricity used for the purpose of sewage treatment will fall under Public Water Works since these are offered by the same entity, viz., Municipal Corporation or Council, etc.

As regards agricultural Tariffs, the Commission is of the view that the Tariffs have to be increased gradually, in order to reduce the cross-subsidy; however, the Tariffs have to be linked to the quality and reliability of supply being given to the agricultural consumers. The Tariff of unmetered agriculture consumption has been increased by a higher rate as compared to metered agriculture consumption so as to discourage unmetered connections and to encourage conversion of unmetered connections to metered connections.

The applicability of Tariffs for different consumer categories has been stipulated in the approved Tariff Schedule, which is annexed as a part of this Order (**Annexure II**).

### **8.18 Rationalisation of Tariff Components**

The topic of restoration of Fixed Charges has been discussed in detail in Section 8.4. In view of the fact that fixed costs of the licensee must be recovered mostly from fixed Tariff and accepting MSEDCL's claim of increased availability of power to its consumers in FY 2011-12, the Commission has increased the Fixed Charges across all categories by approximately 25%. This increase in Fixed Charges will result in the recovery of approximately 15% of total revenue at revised Tariff of MSEDCL for FY 2012-13 from Fixed Charges (for MSEDCL sales to own consumers).

The Commission has continued to determine the Tariffs such that there is an in-built incentive to consumers to reduce their consumption, as the impact on the bills is designed to increase as the consumption increases, on account of the higher telescopic Tariffs applicable for the higher consumption slabs, while at the same time ensuring that even the consumers falling in the higher consumption slabs are charged lower for the consumption corresponding to the lower consumption slab.

The applicability of the BPL category Tariffs has been retained same as that specified in the previous APR Order, read with any clarification thereon. The eligibility criteria have been retained at an annual consumption limit of 360 units. The applicability of BPL category will have to be assessed at the end of each financial year. In case any BPL consumer has consumed more than 360 units in the previous financial year, or within part thereof, then the consumer will subsequently, be considered under the LT-I residential category. Once a consumer is classified under the LT-I category, then he cannot be classified under BPL

category. To make himself eligible for BPL category, he has to make fresh applications to the licensee.

The topic of increase in ToD rebate for off-peak consumption (i.e. 2200 hours to 0600 hours) has been discussed in Paragraph 8.5. Accordingly, the ToD rebate for off-peak consumption is increased to Rs 1.00 per kWh.

As discussed in paragraph 8.11, as against MSEDCL's proposal of introducing new Tariff slabs in LT-II Commercial category in 0-20 kW sub-category, the Commission is not approving any change in Tariff slabs.

Based on the Tariffs determined by the Commission for different consumer categories the following shall be applicable:

- The effective increase in average billing rate after considering the current FAC (at 10% of current energy charge) payable is less than 11% for all categories;
- The Tariff payable by most of the consumers which have been classified in the newly created Public Services categories is expected to come down or remain at similar levels;
- The effective increase in Tariff payable by all subsidising categories is 7% or less; and
- The Tariff in higher slabs of LT-I Domestic has been adjusted to result into lower ABR as compared to Commercial category consumers having similar consumption.

The Time of Day (ToD) Tariffs will be applicable compulsorily to HT I, HT II, HT IV and HT IX categories among HT categories, and LT II (B), LT II (C), LT III, LT V (B), LT X (B) and LT X (C) category consumers having ToD meters, as well as optionally available to LT – II (A), LT V (A) and LT X (A) category consumers, who have ToD meters. The revised ToD Tariffs are as follows:

Time Slot	ToD Tariff (paise per kWh)
2200 Hrs-0600 Hrs	-100
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs	0
0900 Hrs-1200 Hrs	80
1800 Hrs-2200 Hrs	110

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.

As discussed in Paragraph 8.7, The **Billing Demand definition** has been retained at the existing levels, i.e.,

Monthly Billing Demand will be the higher of the following:

- Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours;
- 75% of the highest billing demand/Contract Demand, whichever is lower, recorded during the preceding eleven months;
- 50% of the Contract Demand.

### 8.19 Average Cost of Supply, Tariffs proposed by MSEDCL, and Tariffs approved by the Commission

The computation of average cost of supply (ACoS) is given below:

**Table 133: Average Cost of Supply for FY 2012-13**

Sl.	Particulars	As proposed by MSEDCL	Approved by the Commission
1	Total Revenue Requirement (Rs. crore)	50,750	48,926
2	Total Sales (MU)	89,576	87,971
3	Average Cost of Supply (Rs/kWh)	5.67	5.56

The comparison of the existing Tariffs, Tariffs proposed by MSEDCL and Tariffs approved by the Commission as well as the percentage increase for each consumer category, are given in the Table below:

**Table 134: Average Billing Rate - Existing and approved Tariff**

Category	Average Cost of Supply	Existing Tariff being paid (including FAC)	Average Billing Rate (Rs/kWh)			
			Tariff Proposed by MSEDCL		Revised Tariff	
			ABR	% Increase	ABR	% Increase
<b>LT Category</b>						
LT I-Domestic	5.56	4.48	5.48	22%	4.89	9%
LT II Non Domestic		9.15	9.66	6%	9.78	7%
LT III Public Water Works		2.66	3.41	28%	2.96	11%
LT IV Agriculture Metered		2.14	2.22	4%	2.33	9%
LT IV Agriculture Unmetered		2.22	2.32	4%	2.45	10%
LT V Industrial		6.80	7.48	10%	7.19	6%
LT VI Street Lighting		4.35	4.85	12%	4.67	7%
LT VIII Temporary Others		14.63	14.16	-3%	15.31	5%
LT VIII Advertising and Hording		22.20	20.27	-9%	23.36	5%
LT IX Crematorium & Burial		3.45	3.17	-8%	3.73	8%
LT X Public Services					7.16	

Category	Average Cost of Supply	Existing Tariff being paid (including FAC)	Average Billing Rate (Rs/kWh)			
			Tariff Proposed by MSEDCL		Revised Tariff	
			ABR	% Increase	ABR	% Increase
<b>HT Category</b>						
HT-I Industry (Express Feeder)	5.56	7.17	7.94	11%	7.68	7%
HT-I Industry (Non-Express Feeder)		6.77	7.77	15%	7.26	7%
HT-I Seasonal Industry		8.29	9.31	12%	8.89	7%
HT II- Commercial		10.51	11.35	8%	11.20	7%
HT-III Railways		7.30	7.50	3%	7.81	7%
HT-IV-Public Water Works		5.14	6.03	17%	5.53	8%
HT-V- Agriculture		2.89	2.94	1%	3.10	7%
HT-VI-Bulk Supply-Residential/Commercial		5.16	9.70	88%	5.44	5%
HT- IX Pulic Services					8.95	

The prevailing cross-subsidy and the reduction in cross-subsidy considered by the Commission are given in the Table below:

**Table 135: Cross-Subsidy at existing and approved Tariff**

Category	ACoS (Rs./kWh)	Average Billing Rate (Rs./kWh)		Effective Increase in ABR (Rs./kWh)			ABR/ACoS	
		Before Tariff Hike excl. FAC	Before Tariff Hike Inc FAC	Approved	Increase from base Tariff	Increase from Tariff incl. FAC	Existing Tariff	Approved Tariff
HT Categories	5.56							
HT Industrial		6.43	7.02	7.49	16%	7%	135%	135%
HT-I Express		6.56	7.17	7.68	17%	7%	138%	138%
HT-I Non-Express		6.22	6.77	7.26	17%	7%	131%	130%
HT-I Seasonal		7.62	8.29	8.89	17%	7%	160%	160%
HT Public services		-		8.95				161%
HT Commercial (others)		9.64	10.51	11.20	16%	7%	203%	201%
HT Railway		6.64	7.30	7.81	18%	7%	141%	140%
HT PWW		4.72	5.14	5.53	17%	8%	99%	99%
HT Agriculture		2.65	2.89	3.10	17%	7%	56%	56%
HT Bulk - Group Housing/Commercial Supply		4.73	5.16	5.44	15%	5%	99%	98%
LT Categories								
LT Domestic		4.11	4.48	4.89	19%	9%	86%	88%
BPL		1.02	1.11	1.19	17%	7%	21%	21%
0-100		3.22	3.50	3.89	21%	11%	68%	70%
101-300	5.38	5.88	6.55	22%	11%	113%	118%	

Category	ACoS (Rs./kWh)	Average Billing Rate (Rs./kWh)		Effective Increase in ABR (Rs./kWh)			ABR/ACoS	
		Before Tariff Hike excl. FAC	Before Tariff Hike Inc FAC	Approved	Increase from base Tariff	Increase from Tariff incl. FAC	Existing Tariff	Approved Tariff
300-500		7.35	8.06	8.18	11%	1%	155%	147%
500-1000		8.37	9.20	8.88	6%	-3%	177%	160%
LT Non-Domestic (others)		8.45	9.15	9.78	16%	7%	176%	176%
LT PWW		2.45	2.66	2.96	21%	11%	51%	53%
LT Agriculture – Unmetered		2.02	2.22	2.45	21%	10%	43%	44%
LT Agriculture – Metered		1.93	2.14	2.33	21%	9%	41%	42%
LT Industries		6.26	6.80	7.19	15%	6%	131%	129%
LT Public services		-		7.16				129%
LT Street Light		3.97	4.35	4.67	18%	7%	84%	84%
LT Temporary		13.34	14.63	15.31	15%	5%	282%	275%
LT Advertising and Hoarding		20.37	22.20	23.36	15%	5%	428%	420%
LT Crematorium		3.16	3.45	3.73	18%	8%	66%	67%

In the above Tables,

- (a) ‘Existing Tariff’ refers to the Tariff currently payable by consumers including the present FAC being paid.
- (b) ‘Revised Tariff’ refers to the Tariff approved by the Commission in the present Tariff Order
- (c) Ratio of Average Billing Rate (ABR) to Average Cost of Supply (ACoS)
  - i) ‘Existing Tariff to current ACOS’ refers to the ratio of ABR currently being paid including FAC to the ACOS approved in the present Tariff Order, i.e., Rs. 5.56 per kWh
  - ii) ‘Revised Tariff to current ACOS’ refers to the ratio of ABR approved in this Tariff Order for FY 2012-13 to the ACOS approved in the present Tariff Order, i.e., Rs. 5.56 per kWh

While the Tariffs have been determined such that the revenue gap approved for the year is met entirely through the revision in Tariffs, it is possible that the actual revenue earned by MSEDCL may be higher or lower than that considered by the Commission, on account of the re-categorisation and creation of new consumer categories/sub-categories. The revenue shortfall/surplus, if any, will be Trued up at the time of provisional Truing up for FY 2012-13.

## 8.20 RLC Refund Methodology

The Commission has considered RLC refund amount of Rs. 666 crore for FY 2012-13, out of which Rs. 500 crore is to be refunded to live consumers and Rs. 166 crore is to be refunded to permanently disconnected consumers.

As regards the methodology for the refund of RLC, the Commission has already elaborated the same in the APR Order for MSEDCL in Case No. 72 of 2007. This methodology will apply for RLC refund to live consumers only. The methodology of RLC refund is stated below:

The refund of RLC would be undertaken on a one-to-one basis, rather than to the contributing category as a whole, in the following manner.

a) The refund of RLC will be in absolute terms, viz., Rs/month, and not in terms of paise/kWh of consumption, so that the consumers are eligible for a fixed amount every month, irrespective of their consumption, minimising the need for undertaking detailed truing up of this refund amount. It would also ensure that no injustice is done to consumers who have shifted/are planning to shift to captive consumption subsequently

Since Rs. 500 crore is to be refunded in FY 2012-13 out of the total RLC collection of Rs. 3227 crore, the refund in FY 2012-13 will be in the same proportion of the contribution by that consumer. The percentage of refund works out to 16%. This will also ensure that consumers get the refund in the exact same proportion as their consumption, and consumers who have paid RLC for a lower duration, would get lower refund on a monthly basis, such that all the consumers get their complete refund over the same period of time.

Regarding methodology of RLC refund to PD consumers, MSEDCL should refund the entire outstanding balance of Rs. 166 crore to PD consumers in six equal monthly installments.

## 8.21 Revised Tariffs with effect from 1 August, 2012

**Table 136: Summary of LT Tariffs effective from 1 August, 2012**

Sl.	Consumer category &	Tariffs	
	Consumption Slab	Fixed/ Demand Charge	Energy Charge (paise/kWh)
1	<b>LT I - Residential (BPL)</b>	Rs 10 per month	76
	<b>LT I - Residential</b>		
	0-100 units	Single Phase:	336
	101-300 units	Rs 40 per month	605
	301 - 500 units	Three Phase:	792
	501 - 1000 units	Rs 130 per month\$\$	878
	Above 1000 Units (balance		950

Sl.	Consumer category &	Tariffs	
	Consumption Slab	Fixed/ Demand Charge	Energy Charge (paise/kWh)
	units)		
2	<b>LT II - LT Non-residential or Commercial</b>		
(A)	0-20 kW	Rs 190 per month	
	0 – 200 units per month		585
	Above 200 units per month (only balance consumption)		838
(B)	> 20 kW and $\leq$ 50 kW	Rs 190 per kVA per month	844
(C)	> 50 kW	Rs 190 per kVA per month	1,091
3	<b>LT III – Public Water Works &amp; Sewage Treatment Plants</b>		
(A)	0-20 kW	Rs 50 per kVA per month	235
(B)	> 20 kW and $\leq$ 40 kW	Rs 60 per kVA per month	311
(C)	> 40 kW and < 50 kW	Rs 90 per kVA per month	420
4	<b>LT IV - Agriculture</b>		
4.1	Un-metered Tariff		
(A)	Category 1 Zones*		
(i)	0 - 5 HP	Rs 395 per kW per month Rs 295 per HP per month	
(ii)	Above 5 HP	Rs 436 per kW per month Rs 325 per HP per month	
(B)	Category 2 Zones#		
(i)	0 - 5 HP	Rs 322 per kW per month Rs 240 per HP per month	
(ii)	Above 5 HP	Rs 355 per kW per month Rs 265 per HP per month	
4.2	Metered Tariff (incl Poultry Farms)	Rs 27 per kW per month Rs 20 per HP per month	210
5	<b>LT V - LT Industry</b>		
(A)	0-20 kW	Rs 190 per connection per month	506
(B)	Above 20 kW	Rs 130 per kVA per month	701
6	<b>LT VI – Streetlights</b>		
(A)	Grampanchayat, A, B, & C Class Municipal Council	Rs 40 per kW per month	412
(B)	Municipal Corporation Areas		500
7	<b>LT VII – Temporary Supply</b>		
(A)	TSR – Temporary Supply Religious	Rs 250 per connection per month	327

Sl.	Consumer category & Consumption Slab		Tariffs	
			Fixed/ Demand Charge	Energy Charge (paise/kWh)
(B)	TSO – Temporary Supply Others		Rs 310 per connection per month	1,507
8	<b>LT VIII – Advertisement &amp; Hoardings</b>		Rs 500 per connection per month	2,077
9	<b>LT IX – Crematoriums and Burial Grounds</b>		Rs 250 per connection per month	337
2	<b>LT X - Public Services</b>			
(A)	0-20 kW		Rs 190 per month	
	0 – 200 units per month			536
	Above 200 units per month (only balance consumption)			788
(B)	> 20 kW and ≤ 50 kW		Rs 190 per kVA per month	779
(C)	> 50 kW		Rs 190 per kVA per month	824
<b>TOD Tariffs (in addition to above base tariffs  – compulsory for LT II (B) LT II (C), LT III, LT V (B), LT V (A), LT X (B) and LT X (C) categories  – optional for LT II (A), LT X (A) categories</b>				
	0600 hours to 0900 hours			0
	0900 hours to 1200 hours			80
	1200 hours to 1800 hours			0
	1800 hours to 2200 hours			110
	2200 hours to 0600 hours			(100)

**\*Category 1 Zones (with consumption norm above 1318 hours/HP/year)**

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

1	Amravati	2	Aurangabad	3	Kalyan
4	Konkan	5	Kolhapur	6	Latur
7	Nagpur(U)	8	Nagpur		

**Notes:**



1. Fuel Adjustment Cost (FAC) will be applicable to all consumers and will be charged over the above Tariffs, on the basis of the FAC formula prescribed by the Commission, and computed on a monthly basis.
2. \$\$: Additional Fixed Charge of Rs. 100 per 10 kW load or part thereof above 10 kW load shall be payable.
3. #: Street lights having automatic timers for switching on/off would be levied Demand Charges on the lower of the following:
  - A. 50% of the Contract Demand
  - B. Actual Recorded Demand
4. Billing Demand for all LT categories where MD based Tariff is applicable:

Monthly Billing Demand will be the higher of the following:

- A. 65% of the Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
- B. 40% of the Contract Demand

**Table 137: Summary of HT Tariffs effective from 1 August, 2012**

Sl.	Consumer category &	Tariffs	
	Consumption Slab	Fixed/ Demand Charge	Energy Charge (paise/kWh)
1	<b>HT I – Industry</b>		
(A)	Express Feeders	Rs 190 per kVA per month	701
(B)	Non-express Feeders		633
(C)	Seasonal Industry		779
2	<b>HT II – Commercial</b>		
(A)	Express Feeders	Rs 190 per kVA per month	1045
(B)	Non-express Feeders	Rs 190 per kVA per month	983
3	<b>HT III – Railways</b>	NIL	781
4	<b>HT IV – Public Water Works &amp; Sewage Treatment Plants</b>		
(A)	Express Feeders	Rs 190 per kVA per month	505
(B)	Non-express Feeders		473
5	<b>HT V - Agriculture</b>	Rs 030 per kVA per month	288
6	<b>HT VI</b>		
(A)	Group Housing Society	Rs 160 per kVA per month	482
(B)	Commercial Complex		821
8	<b>HT VIII – Temporary Supply</b>		
(A)	TSR – Temporary Supply Religious	Rs 250 per connection per month	327
(B)	TSO – Temporary Supply Others	Rs 250 per connection per month	1282
9	<b>HT IX - Public Services</b>		

Sl.	Consumer category &	Tariffs	
	Consumption Slab	Fixed/ Demand Charge	Energy Charge (paise/kWh)
(A)	Express Feeders	Rs 190 per kVA per month	821
(B)	Non-express Feeders	Rs 190 per kVA per month	765
	<b>TOD Tariffs (in addition to above base tariffs) – compulsory for HT I, HT II, HT IV, HT IX (A) and HT IX (B) categories</b>		
	0600 hours to 0900 hours		0
	0900 hours to 1200 hours		80
	1200 hours to 1800 hours		0
	1800 hours to 2200 hours		110
	2200 hours to 0600 hours		-100

**Notes:**

- HT V category includes HT Lift Irrigation Schemes irrespective of ownership.
- FAC will be determined every month based on the FAC Formula approved by the Commission
- Billing Demand for all HT categories (except HT II seasonal category)  
Monthly Billing Demand will be the higher of the following:
  - Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
  - 75% of the highest billing demand recorded during preceding eleven months
  - 50% of the Contract Demand.
- Billing Demand for HT Seasonal Category (HT II)  
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
  - 75% of the Contract Demand
  - 50 kVA.During Declared Off-season  
Monthly Billing Demand will be the following:
  - Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours.
- 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, and only in the case when the recorded demand exceeds the contract demand.

The detailed computation of category-wise revenue with revised Tariffs has been given as **Annexure I** to this Order.

The approved Tariff Schedule has been given as **Annexure II** to this Order

## 8.22 Pass through of variation in fuel cost of power purchase

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% Energy Charges.

However, the Commission has suo-moto prepared a draft Order on increasing the ceiling of 10% on FAC to 25% for all distribution licensees. The proceedings for the same are under process. On issuance of the final Order on this issue, the revised FAC ceiling should be considered accordingly.

## 8.23 Vetting of FAC levied on consumers

The levy of Fuel Adjustment Cost (FAC) charge for different consumers and the under-recovery/over-recovery of the corresponding costs will be vetted by the Commission bi-monthly on a post-facto basis, based on submissions made by MSEDCL. However, for the first month after the issue of the Order, MSEDCL should obtain the Commission's prior approval for levy of FAC, to ensure that the FAC is being levied correctly. Thereafter, MSEDCL should submit the FAC computations and details of under-recovery/over-recovery of fuel cost variations on a bi-monthly basis, as applicable.

## 8.24 Wheeling Charges and Loss Compensation

In the ARR Order (Case No. 111 of 2009) for FY 2010-11, the Commission approved wheeling charges and wheeling losses at HT and LT level for FY 2010-11 as under:

**Table 138: Approved wheeling charges and losses in Case no. 111 of 2009**

Particular	Wheeling charge (Rs./ kWh)	Wheeling loss (%)
33 kV	0.04	6%
22 kV/ 11 kV	0.21	9%
LT level	0.36	14%

In various previous Orders of MSEDCL, the Commission observed that separate accounting of network related costs and supply related costs were essential for unbundling of cost and Tariff components and it was a pre-requisite for appropriate

determination of wheeling charges. Also, network costs needed to be further segregated in terms of voltage level (33 kV, 22 kV/11 kV, and LT). The Commission had directed MSEDCL to submit voltage-wise segregated wire cost components. The Commission had also directed MSEDCL to maintain the accounts for expenses incurred on wires business and supply business separately, and submit the same in its previous APR Orders.

However, MSEDCL has still not maintained network related and supply related costs separately. MSEDCL, in its Petition, submitted that it has applied the same ratio of Network and Supply cost segregation as approved by the Commission in its Order dated 2 December, 2010 to arrive at the network related costs. MSEDCL submitted the following:

*“MSEDCL does not maintain Audited Accounts for voltage wise assets. However, based on the engineering study of its assets MSEDCL has arrived at the following segregation. MSEDCL would like to emphasize that this statement is only based on engineering estimate as it does not have accurate audited data. MSEDCL would like to submit that it does not have segregation between GFA of 22/11 V level and LT level assets. Hence, MSEDCL for the purpose of projection has segregated 22/11 kV level GFA as shown in the table below...”*

MSEDCL has applied the ratio of voltage-wise GFA ratio as approved by the Commission in Order dated 12 September, 2010 and 2 December, 2010. Therefore, MSEDCL has considered the following voltage wise GFA ratio. The opening GFA of MSEDCL for FY 2012-13 has been segregated in terms of various voltage levels as under. The estimated sales at each level were projected by MSEDCL as shown below.

**Table 139: Voltage-wise ratio and estimated sale as submitted by MSEDCL**

Particular	Voltage-wise GFA ratio	Sales (% of total)	Sales (MUs)
o 33 kV level	14%	11.23%	10,237
22 kV/ 11 kV level	56%	33.68%	30,703
a LT level	30%	55.09%	50,220

arrive at the cost of wheeling at the various voltage levels, the total wire network cost at various voltage levels has been apportioned to various voltage levels (i.e., 33 kV, 22 kV/11 kV and LT) in the ratio of sales at respective voltage levels. The wire costs at higher voltage levels has been further apportioned to lower voltage levels, since the HT system is also being used for supply to the LT.

Subsequently, MSEDCL calculated the share of each voltage category in the non coincident peak demand using percentage sales for each category. The wheeling charge (in Rs./kW/month) was then derived by dividing the wheeling cost of each voltage category by the non-coincident peak demand for that category and dividing it by 12 months. Finally, the wheeling charges for each category were calculated by

dividing the wheeling charge (in Rs./kW/month) for each category by the load factor (assumed to be 66%) and 720 hrs (24x30).

MSEDCL proposed that wheeling losses determined by the Commission in its order dated 12 September, 2010 for drawl at 33 kV and 22/11 kV shall be applicable for FY 2012-13. MSEDCL submitted that consumers seeking Open Access at LT level shall be levied with a distribution loss 1.5% less (1% reduction for FY 2011-12 and 0.5% reduction for FY 2012-13) than opening distribution loss FY 2010-11. Hence, MSEDCL proposed the wheeling loss applicable for Open Access transactions entailing drawl at LT level is 12.50%.

The proposed wheeling charges and losses at each voltage level were proposed to be as below:

**Table 140: Proposed wheeling charges and losses for FY 2012-13**

Particular	Wheeling charge (Rs./ kWh)	Wheeling loss (%)
33 kV	0.12	6%
22 kV/ 11 kV	0.64	9%
LT level	1.10	12.5%

For computing the wheeling charges applicable for FY 2012-13, in the absence of details provided by MSEDCL, the Commission has considered the voltage-wise GFA ratio as approved in its Order dated 2 December, 2010. The ratio of sales across the categories has been considered the same at that in Order dated 2 December, 2010.

**Table 141: GFA and Sales ratio considered by the Commission**

Particular	Voltage-wise GFA ratio	Sales (% of total)
33 kV level	14%	11.23%
22 kV/ 11 kV level	56%	33.68%
LT level	30%	55.09%

The Commission has followed the methodology as laid down in its Order dated 2 December, 2010 and has estimated the wheeling charges for FY 2012-13. The network cost has been determined as shown below.

**Table 142: Determination of network cost for FY 2012-13**

Sr. No.	Particular	Approved for FY 2012-13	Network cost (%)	Supply Cost (%)	Network cost (Rs. crore)	Supply Cost (Rs. crore)
1	Power Purchase Expenses	37,238	0%	100%	-	37,238
2	Operation & Maintenance Expenses					
2.1	Employee Expenses	2,438	60%	40%	1,463	975

Sr. No.	Particular	Approved for FY 2012-13	Network cost (%)	Supply Cost (%)	Network cost (Rs. crore)	Supply Cost (Rs. crore)
2.2	Administration & General Expenses	314	50%	50%	157	157
2.3	Repair & Maintenance Expenses	611	87%	13%	531	79
3	Depreciation, including advance against depreciation	1,309	87%	13%	1,139	170
4	Interest on Long-term Loan Capital	1,127	87%	13%	980	146
6	Interest on Working Capital, consumer security deposits and Finance Charges	559	9%	91%	50	509
8	Provision for Bad Debts	756	9%	91%	68	688
9	Other Expenses	9	0%	100%	-	9
10	Income Tax	-	87%	13%	-	-
11	Transmission Charges paid Transmission Licensee	3,105	0%	100%	-	3,105
12	Contribution to contingency reserves	63	92%	8%	58	5
13	Incentives/Discounts	157	0%	100%	-	157
14	Total Revenue Expenditure	47,687			4,447	43,241
15	Return on Equity Capital	989	80%	20%	791	198
16	Aggregate Revenue Requirement	48,676			5,237	43,438
17	Less: Non Tariff Income	(1,379)	0%	100%	-	(1,379)
18	Less: Income from wheeling charges	(18)	100%	0%	(18)	-
19	Less: Income from CSS	(9)	0%	100%	-	(9)
20	Aggregate Revenue Requirement	47,270	12%	88%	5,220	42,051

The Commission has computed the share of each voltage category in the non coincident peak demand using % sales for each category.

**Table 143: Voltage-wise share of network cost**

Particulars	Network cost (Rs. crore)	Sales (MUs)	% of Sales between 3 levels	% of Sales between 22/11 kV & LT Level	Wheeling cost breakup for 33 kV (Rs. crore)	Wheeling cost breakup for 11/22 kV	Wheeling cost for LT level	Total wheeling cost	Wheeling Cost (Rs./kWh)
33 kV	731	9,879	11.2%		82			82	0.08
11/22 kV	2,923	29,629	33.7%	37.9%	246	1,109		1,355	0.46
LT level	1,566	48,463	55.1%	62.1%	403	1,814	1,566	3,783	0.78
Total	5,220	87,971	100.0%	100.0%	731	2,923	1,566	5,220	0.59

The wheeling charge (in Rs./kW/month) was then derived by dividing the wheeling cost of each voltage category by the non-coincident peak demand for that category and dividing it by 12 months. Finally, the wheeling charges for each category were calculated by dividing the wheeling charge (in Rs./kW/month) for each category by the load factor (assumed to be 66%) and 720 hrs (24x30). Therefore, the approved wheeling charges for FY 2012-13 are as shown below.

**Table 144: Wheeling charges approved for FY 2012-13**

Particulars	Wheeling loss (%)	Wheeling cost (Rs. crore)	Share in non coincident peak demand (MW)	Wheeling charge (Rs./kW/ month)	Wheeling charges (Rs./kWh)
33 kV	6.00%	82	1,312	52	0.11
11/22 kV	9.00%	1,355	3,937	287	0.60
LT level	12.50%	3,783	6,439	490	1.03
Total		5,220	11,688	372	0.78

For estimating the wheeling losses, the Commission has considered the 33 kV and 22 kV/11kV loss level as approved in Case No. 111 of 2009. For the LT level, the Commission has considered a 1.5% reduction, in line with the proposed reduction in loss level targets for MSEDCL for FY 2012-13. Accordingly, the approved wheeling charges and wheeling loss at HT and LT level for FY 2012-13 is summarised in the following Table:

**Table 145: Approved wheeling charges and losses for FY 2012-13**

Particular	Wheeling charge (Rs./kWh)	Wheeling loss (%)
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Particular	Wheeling charge (Rs./ kWh)	Wheeling loss (%)
33 kV	0.11	6%
22 kV/ 11 kV	0.60	9%
LT level	1.03	12.5%

## 8.25 Cross-subsidy Surcharge for FY 2012-13

The Commission vide Order in Case No. 43 of 2010 dated 10 September, 2011, determined Cross Subsidy Surcharge (CSS) to be levied on Open Access consumers. MSEDCL has not projected any income from CSS for FY 2011-12 or FY 2012-13, though MSEDCL has proposed new CSS for the various categories.

MSEDCL has proposed a new CSS for FY 2012-13 based on estimates considered by MSEDCL in the ARR. However, the Commission would like to note that there are various appeals pending before the Hon'ble ATE with regard to computation of CSS, etc. Some of the appeals are Appeal No. 132 of 2011; 133 of 2011; 139 of 2011; 140 of 2011; 178 of 2011 among others. Since the issue is subjudice, no view therefore is being taken on the issue in the present proceedings. Therefore, the Commission retains CSS at the existing level and may consider revising the CSS at a later point in time.

## 8.26 Incentives and Disincentives

**Power Factor Incentive** (Applicable for HT I, HT II, HT IV, HT V, HT VI and HT IX categories, as well as LT II (B), LT II (C), LT III, LT V (B), LT X (B) and LT X (C) categories)

Whenever the average power factor is more than 0.95, an incentive shall be given at the rate of the following percentages of the amount of the monthly bill including Energy Charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Incentive
1	0.951 to 0.954	0.95	0%
2	0.955 to 0.964	0.96	1%
3	0.965 to 0.974	0.97	2%
4	0.975 to 0.984	0.98	3%
5	0.985 to 0.994	0.99	5%
6	0.995 to 1.000	1.00	7%

Note: PF to be measured/computed upto 3 decimals, after universal rounding off



**Power Factor Penalty** (Applicable for HT I, HT II, HT IV, HT V, HT VI and HT IX categories, as well as LT II (B), LT II (C), LT III, LT V (B), LT X (B) and LT X (C) categories)

Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of the following percentages of the amount of the monthly bill including Energy Charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Penalty
1	0.895 to 0.900	0.90	0%
2	0.885 to 0.894	0.89	2%
3	0.875 to 0.884	0.88	3%
4	0.865 to 0.874	0.87	4%
5	0.855 to 0.864	0.86	5%
6	0.845 to 0.854	0.85	6%
7	0.835 to 0.844	0.84	7%
8	0.825 to 0.834	0.83	8%
9	0.815 to 0.824	0.82	9%
10	0.805 to 0.814	0.81	10%
...	...	...	...

Note: PF to be measured/computed upto 3 decimals, after universal rounding off

### **Prompt Payment Discount**

A prompt payment discount of one percent on the monthly bill (excluding Taxes and Duties) shall be available to the consumers if the bills are paid within a period of 7 days from the date of issue of the bill, or within 5 days of the receipt of the bill, whichever is later.

### **Delayed Payment Charges (DPC)**

In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of 2 percent on the total electricity bill (including Taxes and Duties) shall be levied on the bill amount. However, if a consumer makes part payment of a bill within the due date, then the delayed payment charges shall be applicable only on the amount which was not paid within the due date. 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 per annum (%)
1	Payment after due date up to 3 months ( 0-3)	12
2	Payment made after 3 months and before 6 months (3-6)	15
3	Payment made after 6 months (>6)	18

### Load Factor Incentive

Consumers having load factor over 75% upto 85% will be entitled to a rebate of 0.75% on the Energy Charges for every percentage point increase in load factor from 75% to 85%. Consumers having a load factor over 85 % will be entitled to rebate of 1% on the Energy Charges for every percentage point increase in load factor from 85%. The total rebate under this head will be subject to a ceiling of 15% of the Energy Charges for that consumer. This incentive is limited to HT I, HT II and HT IX categories only. Further, the load factor rebate will be available only if the consumer has no arrears with MSEDCL, and payment is made within seven days from the date of the bill. However, this incentive will be applicable to consumers where payment of arrears in installments has been granted by MSEDCL, and the same is being made as scheduled. MSEDCL has to take a commercial decision on the issue of how to determine the time frame for which the payments should have been made as scheduled, in order to be eligible for the Load Factor incentive.

The Load Factor has been defined below:

$$\text{Load Factor} = \frac{\text{Consumption during the month in MU}}{\text{Maximum Consumption Possible during the month in MU}}$$

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor x (Total no. of hrs during the month less planned load shedding hours\*)

\* - Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme.

In case the billing demand exceeds the contract demand in any particular month, then the Load Factor Incentive will not be payable in that month. (The billing demand definition excludes the demand recorded during the non-peak hours i.e. 22:00 hrs to 06:00 hrs and therefore, even if the maximum demand exceeds the

contract demand in that duration, Load Factor Incentives would be applicable. However, the consumer would be subjected to the penal charges for exceeding the contract demand and has to pay the applicable penal charges).

### **EHV supply rebate**

Consumers availing supply at Extra High Voltage (66 kV and above) will be given a rebate of 3% on Energy Charges. Further, the EHV supply rebate will be available only if the consumer has no arrears with MSEDCL. However, this rebate will be applicable to consumers where payment of arrears in installments has been granted by MSEDCL, and the same is being made as scheduled. MSEDCL has to take a commercial decision on the issue of how to determine the time frame for which the payments should have been made as scheduled, in order to make the consumer eligible for the EHV supply rebate.

## **8.27 APPLICABILITY OF ORDER**

This Tariff Order for MSEDCL for FY 2012-13, shall come into force with effect from 1 August, 2012.

In addition to the tariff notified in this Order, MSEDCL is allowed to recover the additional charges on account of unrecovered FAC of Rs. 1,483 crore in the months of June 2012 to November 2012, as per the methodology approved by the Commission vide Order dated 15 June, 2012 in Case No. 43 of 2012.

The Commission acknowledges the efforts taken by the Consumer Representatives and other individuals and organizations for their valuable contribution to the Truing up for FY 2010-11, determination of aggregate revenue requirement for FY 2011-12 and FY 2012-13 and determination of Tariff for FY 2012-13.

Sd/-

(Vijay L. Sonavane)

Member

Sd/-

(V.P. Raja)

Chairman

# Annexure I

## Revenue from revised Tariffs effective from 1 August, 2012\*

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. crore)	Revenue from Energy Charge (Rs. crore)	Total (Rs. crore)	ABR (Rs./k Wh)
<b>HT Category</b>									
<b>HT-I - Industries</b>									
HT-I - Cont (Express Feeders)	2,041	190	701	18,554	5,827,581	1,249	13,003	14,252	7.68
HT-I - NonCont (Non Express Feeders)	9,415	190	633	9,732	4,186,425	897	6,165	7,062	7.26
HT-I - Seasonal Category	649	190	779	148	179,674	16	115	132	8.89
<b>TOD Consumption</b>									
2200 Hrs-0600 Hrs			(100)	9,383	-	-	(938)	(938)	-
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs			-	10,805	-	-	-	-	-
0900 Hrs-1200 Hrs			80	3,697	-	-	296	296	-
1800 Hrs-2200 Hrs			110	4,550	-	-	500	500	-
<b>Total HT-I Industrial</b>	<b>12,105</b>			<b>28,435</b>	<b>10,193,680</b>	<b>2,163</b>	<b>19,142</b>	<b>21,304</b>	<b>7.49</b>
<b>HT-II Commercial</b>									
A) Express feeder		190	1,045	644	400,831	73	673	746	11.59
B) Non-Express Feeder		190	983	1,067	664,003	121	1,049	1,170	10.97
<b>Total HT II Commercial</b>	<b>2,922</b>			<b>1,711</b>	<b>1,064,835</b>	<b>194</b>	<b>1,722</b>	<b>1,916</b>	<b>11.20</b>

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. crore)	Revenue from Energy Charge (Rs. crore)	Total (Rs. crore)	ABR (Rs./k Wh)
<b>HT-III Railways</b>	44	-	781	1,460	384,500	-	1,141	1,141	7.81
<b>HT-IV Public Water Works (PWW)</b>									
Express Feeders	444	190	505	969	220,353	49	489	538	5.55
Non-Express Feeders	463	190	473	219	98,829	22	104	126	5.73
TOD Consumption									
2200 Hrs-0600 Hrs			(100)	392	-	-	(39)	(39)	-
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs			-	452	-	-	-	-	-
0900 Hrs-1200 Hrs			80	154	-	-	12	12	-
1800 Hrs-2200 Hrs			110	190	-	-	21	21	-
Total HT-IV Public Water Works (PWW)	907			1,188	319,181	71	587	657	5.53
<b>HT-V Agricultural</b>	1,186	30	288	714	442,245	16	206	222	3.10
<b>HT-VI Bulk Supply</b>									
Residential Complex	341	160	482	328	104,864	20	158	178	5.44
Commercial Complex	-	160	821	-	-	-	-	-	-
Total HT-VI Bulk Supply	341			328	104,864	20	158	178	5.44
	-								
<b>HT VIII - Temporary Supply</b>	79	250	1,282	-	20,430	-	-	-	-
<b>HT-IX Public services</b>									
Express feeders		190	821	126	78,632	14	104	118	9.34
Non-Express feeders		190	765	303	188,376	34	232	266	8.79
Total HT-Public services				429	267,008	49	335	384	8.95

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. crore)	Revenue from Energy Charge (Rs. crore)	Total (Rs. crore)	ABR (Rs./k Wh)
	-								
<b>TOTAL HT Category</b>	17,583			34,265		2,512	23,290	25,803	7.53
<b>LT Category</b>									
<b>Domestic (LT-I)</b>									
BPL (0-30 Units)	765,265	10	76	217	103,275	9	17	26	1.19
Consumption > 30 Units per month	15,394,478			-	14,997,460	-	-	-	-
1-100 Units	11,237,969	40	336	10,152	10,948,146	539	3,406	3,945	3.89
101-300 Units	3,694,675	40	605	3,508	3,599,390	177	2,121	2,299	6.55
301-500 Units	307,890	40	792	569	299,949	15	450	465	8.18
500-1000 Units	153,945	40	878	703	149,975	7	617	624	8.88
Above 1000 Units		40	950						
Three Phase Connection	315,138	130	-	-	1,929,935	49		49	
Sub Total Domestic	16,474,881			15,149	17,030,670	797	6,611	7,408	4.89
<b>Non Domestic (LT-2)</b>									
0-20 kW	1,487,509			3,089	2,826,566				
0-200 Units	353,284	190	585	660		81	386	466	7.07
Above 200 units	890,274	190	838	807		203	676	879	10.89
>20-50 kW	15,611	190	844	577	527,629	96	487	583	10.11
>50 kW	3,316	190	1,091	248	233,000	42	271	313	12.62
Sub Total Non Domestic (LT-2)	1,262,484			2,293	3,587,195	422	1,820	2,242	9.78
-									
<b>Public Water Works (LT-III)</b>									
0-20 kW	42,742	50	235	450	306,765	18	106	124	2.76
20-40 kW	601	60	311	54	28,638	2	17	19	3.49

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. crore)	Revenue from Energy Charge (Rs. crore)	Total (Rs. crore)	ABR (Rs./k Wh)
40-50 kW	205	90	420	35	17,063	2	15	16	4.73
Sub Total PWW	43,548			539	352,466	22	137	160	2.96
-									
<b>Agriculture (LT-IV)</b>									
Unmetered Tariff	1,574,291			10,680	7,724,318				
Zones with (Above 1318 Hrs/HP/Annum)	-			-	4,789,077				
0-5 HP	-	295	-	-	3,352,354	1,187	-	1,187	
Above 5 HP	-	325	-	-	1,436,723	560	-	560	
Zones with (Below 1318 Hrs/HP/Annum)	-	-	-	-	2,935,241	-	-	-	
0-5 HP	-	240	-	-	2,054,669	592	-	592	
Above 5 HP	-	265	-	-	880,572	280	-	280	
Metered Tariff (Including Poultry Farms)	1,884,313	20	210	10,660	10,326,937	248	2,239	2,486	2.33
Sub Total Agriculture	3,458,604			21,340	18,051,255	2,867	2,239	5,105	2.39
<b>LT Industries (LT-V)</b>									
0-20 kW	278,629	190	506	2,500	3,941,009	64	1,265	1,329	5.32
Above 20 kW	56,528	130	701	2,847	4,567,506	428	1,995	2,422	8.51
TOD Consumption									
2200 Hrs-0600 Hrs	-	-	(100)	963	-	-	(96)	(96)	-
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs	-	-	-	2,460	-	-	-	-	-
0900 Hrs-1200 Hrs	-	-	80	802	-	-	64	64	-

Category	No of consumers	Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. crore)	Revenue from Energy Charge (Rs. crore)	Total (Rs. crore)	ABR (Rs./k Wh)
1800 Hrs-2200 Hrs	-	-	110	1,123	-	-	124	124	-
Sub total (LT-V) General Motive Power	335,157			5,347	8,508,515	491	3,351	3,842	7.19
<b>Street Light (LT-VI)</b>									
Grampanchayat A, B & C Class Municipal Council	69,173	40	412	504	293,809	14	208	222	4.40
Municipal corporation Area	6,374	40	500	327	56,303	3	164	166	5.09
Sub Total Street Light	75,547			831	350,112	17	371	388	4.67
<b>Temporary Connection (LT-VII)</b>									
Temporary Connection (Other Purposes)	8,978	310	1,507	66	48,018	3	100	103	15.57
Temporary Connection (Religious)	393	250	327	2	1,691	0	1	1	4.03
Sub Total Temporary	9,371			68	49,709	3	100	104	15.31
-									
Advertising and Hording (LT-VIII)	1,916	500	2,077	4	5,053	1	9	10	23.36
Crematorium & Burial (LT-IX)	261	250	337	2	1,242	0	1	1	3.73
<b>LT X - Public services</b>									
0-200 Units	63,219	190	536	730	-	14	391	406	5.56
>200 units	180,732	190	788	892	-	41	703	744	8.34
>20-50 kW	822	190	779	30	27,770	5	24	29	9.45
>50 kW	175	190	824	13	12,263	2	11	13	9.96
Subtotal - LT Public services	244,947			1,665	-	63	1,129	1,192	7.16
<b>Total LT Category</b>	<b>21,906,717</b>			<b>47,239</b>	<b>-</b>	<b>4,684</b>	<b>15,768</b>	<b>20,452</b>	<b>4.33</b>
Bhivandi sales	-		384	3,346	-	-	1,284	1,284	3.84



Category	No of consumers	Fixed / Demand Charge (Rs /service connection/ month or Rs /kVA/ month or Rs /HP/ month)	Energy Charge (paise/ kWh)	Sales (MU)	Connected Load/ Contract Demand (HP/kVA)	Revenue from Fixed/ Demand Charge (Rs. crore)	Revenue from Energy Charge (Rs. crore)	Total (Rs. crore)	ABR (Rs./k Wh)
Aurangabad Sales	-		521	2,173	-	-	1,131	1,131	5.21
Nagpur Sales	-		379	1,611	-	-	611	611	3.79
Jalgaon Sales	-		450	922	-	-	415	415	4.50
Estimated LF/PF Incentives								(971)	
Stand By Charges								396	
EHV rebate								(195)	
<b>MSEDCL Total Revenue</b>	<b>21,924,300</b>			<b>89,556</b>	<b>-</b>	<b>7,196</b>	<b>42,500</b>	<b>48,926</b>	<b>5.46**</b>

\*Revenue indicative (due to the creation of new categories for which information is not available currently).

\*\*ABR, considering sales at input level for DF's

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**Annexure II: Approved Tariff Schedule**

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**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.  
(WITH EFFECT FROM 1 AUGUST, 2012)**

The Maharashtra Electricity Regulatory Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 and all other powers enabling it in this behalf, has determined in the matter of Case No.19 of 2012, the retail Tariff for supply of electricity by Maharashtra State Electricity Distribution Company Limited (MSEDCL) for various classes of consumers as applicable from 1 August, 2012.

**GENERAL:**

1. These Tariffs supersede all Tariffs so far in force including in the case where any agreement provides specifically for continuance of old agreemental Tariff, or any modifications thereof as may have been already agreed upon.
2. Tariffs are subject to revision and/or surcharge that may be levied by MSEDCL from time to time as per the directives of the Commission.
3. The Tariffs are exclusive of Electricity Duty, Tax on Sale of Electricity (ToSE) and other charges as levied by Government or other competent Authorities and the same, will be payable by the consumers in addition to the charges levied as per the Tariffs hereunder.
4. The Tariffs are applicable for supply at one point only.
5. MSEDCL reserves the right to measure the Maximum Demand for any period shorter than 30 minutes period of maximum use, subject to conformity with the prevalent Supply Code, in cases where MSEDCL considers that there are considerable load fluctuations in operation.
6. The Tariffs are subject to the provisions of the MERC (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 in force (i.e., as on 1 August, 2012) and directions, if any that may be issued by the Commission from time to time.
7. Unless specifically stated to the contrary, the figures of Energy Charge relate to Rupees per unit (kWh) charge for energy consumed during the month.
8. Fuel Adjustment Costs (FAC) Charge as may be approved by the Commission from time to time shall be applicable to all categories of consumers and will be charged over and above the Tariffs on the basis of FAC formula specified by the Commission and computed on a monthly basis.

**LOW TENSION (LT) – TARIFF****LT I: LT – Residential (BPL)**

Applicability

Residential consumers who have a sanctioned load of up to and less than 0.1 kW, and who have consumed less than 360 units per annum in the previous financial year. The applicability of BPL category will have to be assessed at the end of each financial year. In case any BPL consumer has consumed more than 360 units in the previous financial year, then the consumer will henceforth, be considered under the LT-I residential category. Once a consumer is classified under the LT-I category, then he cannot be classified under BPL category.

The categorisation of such BPL consumers will be reassessed at the end of the financial year, on a pro-rata basis. Similarly, the classification of BPL consumers who have been added during the previous year would be assessed on a pro-rata basis, i.e., 30 units per month.

All the new consumers subsequently added in any month with sanctioned load of upto and less than 0.1 kW and consumption between 1 to 30 units (on pro rata basis of 1 unit/day) in the first billing month, will be considered in BPL Category.

No Institutions will be covered under BPL category.

Rate Schedule

Consumption (kWh)	Slab	Fixed/Demand Charge (Rs./month)	Energy Charge (Rs./kWh)
BPL Category		10.00	0.76

**LT I: LT – Residential**Applicability

Electricity used at Low/Medium Voltage for operating various appliances used for purposes like lighting, heating, cooling, cooking, washing/cleaning, entertainment/leisure, water pumping in the following places:

- Private residential premises, Government/semi-Government residential quarters.
- Premises exclusively used for worship such as temples, gurudwaras, churches, mosques, religious and spiritual institutions, etc. Provided that Halls, Gardens or any other portion of the premises that may be let out for consideration or used for commercial activities would be charged at LT-II Tariff as applicable.
- All Students Hostels affiliated to Educational Institutions.
- All Ladies Hostels, such as Students (Girls) Hostels, Working Women Hostels, etc.
- Other type of Hostels, like (i) Homes/Hostels for Destitute, Handicap or Mentally deranged persons (ii) Dharamshalas, (iii) Old age houses, (iv) Rescue houses, (v) Orphanages, etc.
- Government / Private / Co-operative Housing Colonies (where electricity is used exclusively for domestic purpose) only for common facilities, like Water Pumping /

Street Lighting / Lifts /Parking Lots/ Fire Fighting Pumps / Premises (Security) Lighting, etc.

- g) Sports Club / Health Club / Gymnasium / Swimming Pool / Community Hall of Government / Private / Co-operative Housing Colonies provided said Sports Club / Health Club / Gymnasium / Swimming Pool / Community Hall is situated in the same premises, and is exclusively meant for the members of the said Government / Private / Co-operative Housing Colonies and no outsider is allowed therein.
- h) Telephone booth owned/operated by handicapped person
- i) Residential premises used by professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc., in furtherance of their professional activity in their residences but shall not include Nursing Homes and any Surgical Wards or Hospitals.
- j) Single phase household Flour Mill (Ghar-ghanti) used for captive purpose only.
- k) Any residential LT consumer, having consumption upto 500 units per month (current month during which the supply is being taken), and who undertakes construction or renovation activity in his existing premises, does not require any separate temporary connection and this consumer should be billed at his residential Tariff rate
- l) Consumers who have taken power supply on High Tension for any of the above mentioned purpose shall be billed as per the Tariff applicable for power supply on Low Tension

This category is also applicable for all consumers under LT-II (Non-residential or Commercial), LT-V (LT Industry) and LT-X (Public services) who consume less than 300 units a month, and who have consumed less than 3600 units per annum in the previous financial year. The applicability of this Tariff will have to be assessed at the end of each financial year. In case any consumer has consumed more than 3600 units in the previous financial year, then the consumer will henceforth not be eligible for Tariff under this category.

#### Rate Schedule

Consumption Slab (kWh)	Fixed/Demand Charge	Energy Charge (Rs./kWh)
0-100 units	Single Phase : Rs. 40 per month Three Phase : Rs. 130 per month <sup>\$\$</sup>	3.36
101 – 300 units		6.05
301 – 500 units		7.92
501 – 1000 units		8.78
Above 1000 units		9.50

#### Note:

- a)  $\text{Rs.}$  Additional Fixed Charge of Rs. 100 per 10 kW load or part thereof above 10 kW load shall be payable.
- b) Professionals like Lawyers, Doctors, Professional Engineers, Chartered Accountants, etc., occupying premises exclusively for conducting his profession, shall not be eligible for this Tariff and will be charged at LT-II Tariff as may be applicable.

## **LT II: LT– Non-Residential or Commercial**

### Applicability

#### **(A) 0-20 kW**

Electricity used at Low/Medium Voltage in all non-residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting, heating, cooling, cooking, washing/cleaning, entertainment/leisure, pumping in following (but not limited to) places:

- a) Non-Residential, Commercial and Business premises, including Shopping malls/Show rooms
- b) Combined lighting and power services for Entertainment including film studios, cinemas and theatres, including multiplexes, Hospitality, Leisure, Meeting/Town Halls and Recreation and Public Entertainment places.
- c) Offices including Government Offices, Commercial Establishments
- d) Marriage Halls, Hotels / Restaurants, Ice-cream parlours, Coffee Shops, etc. Guest Houses, Internet / Cyber Cafes, Mobile Towers, Microwave Towers, Satellite Antennas used for telecommunication activity, Telephone Booths not covered under LT I above, Fax / Xerox Shops;
- e) Automobile and any other type of repair centres, Retail Gas Filling stations, Petrol Pumps & Service Stations including Garages, Tyre Retreading / Vulcanizing units
- f) Tailoring Shops, Computer Training Institutes, Typing Institutes, Photo Laboratories, Laundries, Beauty Parlour & Saloons;
- g) Banks, Telephone Exchanges, TV Station, Micro Wave Stations, All India Radio Stations, ATM Centres
- h) For common facilities, like Water Pumping / Street Lighting / Lifts / Fire Fighting Pumps / Premises (Security) Lighting, etc. in Commercial Complexes;
- i) Sports Club, Health Club, Gymnasium, Swimming Pool;
- j) Electricity used for the external illumination of monumental/historical/heritage buildings approved by MTDC.
- k) Construction of all type of structure/ infrastructure such as buildings, bridge, Flyovers, dam, Power stations, Road, Aerodrome, Tunnels Laying of Pipe line for all purpose; for any construction or renovation activity in the existing premises
- l) Any residential LT consumer, having consumption greater than 500 units per month (current month during which the supply is being taken), and who undertakes construction or renovation activity in his existing premises, does not require any separate temporary connection and this consumer should be billed at his LT-II Commercial Tariff rate

- m) Aquaculture, Fisheries, Sericulture and Cattle Breeding Farms  
 n) Research & Development units situated outside Industrial premises;  
 o) Airports (only activities not related to aeronautical operations)

Consumption Slab (kWh)	Fixed/ Demand Charge (Rs./ month)	Energy Charge (Rs./kWh)
<b>(A) 0-20 kW</b>		
0 to 200 units per month	190.00	5.85
Above 200 units per month (only balance consumption)	190.00	8.38

**(B) > 20 kW and ≤ 50 kW and (C) > 50 kW**

Applicability

As per the applicability described in LT II (A) and for the Sanctioned load in the range applicable in this sub-category i.e. LT II (B) and LT II (C)

Consumption Slab	Fixed/ Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>(B) &gt; 20 kW and ≤ 50 kW</b>	190.00	8.44
<b>(C) &gt; 50 kW</b>	190.00	10.91
<b>ToD Tariffs (in addition to above base Tariffs) (in paise/kWh)</b>		
2200 Hrs-0600 Hrs		-100
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0
0900 Hrs-1200 Hrs		80
1800 Hrs-2200 Hrs		110

Note:

The ToD Tariff is applicable for LT-II (B) and (C) category, and optionally available to LT-II (A) having ToD meter installed.

**LT III: LT - Public Water Works and Sewage Treatment Plants**

Applicability

Applicable for use of Electricity / Power Supply at Low / Medium Voltage for pumping of water, purification of water & other allied activities related with Public Water Supply Schemes and Sewage Treatment Plants provided such Public Water Supply Schemes and Sewage Treatment Plants are owned, operated and managed by Local Self Government Bodies, like Gram Panchayat, Municipal Council, Municipal Corporation including Maharashtra Jeevan Pradhikaran, and cantonment boards;.

Public Water Supply Schemes and Sewage Treatment Plants (including other allied activities) owned, operated and managed by any other Agency other than Local Self Government Body (excluding Maharashtra Jeevan Pradhikaran) shall not be eligible for LT III tariff and shall be billed as per either LT II (A) or LT II (B) or LT II (C) or as the case may be, except those covered in LT V.

Rate Schedule

Consumer Category	Fixed/Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
(A) 0 - 20 kW	50.00	2.35
(B) >20 kW and <= 40 kW	60.00	3.11
(C) >40 kW and <= 50 kW	90.00	4.20
<b>ToD Tariffs (in addition to above base Tariffs) (in paise/kWh)</b>		
2200 Hrs-0600 Hrs		-100
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0
0900 Hrs-1200 Hrs		80
1800 Hrs-2200 Hrs		110

**LT IV: LT- Agricultural**

Applicability

Applicable for motive power services exclusively for Agricultural pumping loads and pre-cooling & cold storage for Agricultural Produce on LT Supply.

This Tariff shall also be applicable for use of electricity / power supply at Low / Medium Voltage:

- i. For Poultry exclusively undertaking Layer & Broiler activities, including Hatcheries;
- ii. For High Tech Agricultural (i.e. Tissue Culture, Green House, Mushroom activities), provided the power supply is exclusively utilized by such Hi-Tech Agriculture Consumers for purpose directly concerned with crop cultivation process and further provided that the power is not utilized for any engineering or industrial process;
- iii. For Floriculture, Horticulture, Nurseries, Plantations, but shall not be applicable for Aquaculture, Sericulture, Fisheries, etc.
- iv. For Cane crusher and/or fodder cutter for self use for agricultural processing purpose, but shall not be applicable for operating a flour mill, oil mill or expeller in the same premises, either operated by a separate motor or change of belt drive;
- v. For one lamp of wattage up to 40 to be connected to the motive power circuit for use in the pump house.

Rate Schedule

Consumer Category	Fixed/Demand Charge (Rs./ HP/ month)	Energy Charge (Rs./kWh)
<b>LT IV – Agriculture</b>		
Un-metered Tariff		
Category 1 Zones*		
(a) 0-5 HP	295.00	NIL
(b) Above 5 HP	325.00	NIL
Category 2 Zones#		
(a) 0-5 HP	240.00	NIL
(b) Above 5 HP	265.00	NIL
Metered Tariff (including Poultry Farms)	20.00	2.10

*Category 1 Zones (with consumption norm above 1318 hours/HP/year)		
1) Bhandup (U)	2) Pune	3) Nashik
#Category 2 Zones (with consumption norm below 1318 hours/HP/year)		
1) Amravati	2) Aurangabad	3) Kalyan
4) Konkan	5) Kolhapur	6) Latur
7) Nagpur (U)	8) Nagpur	

**Note:**

Above Tariffs shall be applicable irrespective of whether pre-cooling & cold storage for Agricultural Produce are being used by farmers or traders, and irrespective of the ownership pattern.

- i. The Flat Rate Tariff as above will remain in force only till meters are installed, and once meter is installed; the consumer will be billed as per the Tariff applicable to metered agricultural consumers.
- ii. The list of Category 1 Zones (with consumption norm above 1318 hours/ HP/year) & Category 2 Zones (with consumption norm below 1318 hours/HP/year) is given above.
- iii. Supply under this Tariff will be given for minimum load of 2 HP. If any consumer requires any load of less than 2 HP for agricultural purposes, he shall be required to pay the Fixed Charge/Energy Charge on this basis as if a load of 2 HP is connected.

**LT V: LT- Industry****Applicability**

Applicable for industrial use at Low/Medium Voltage in premises for purpose of manufacturing, including that used within these premises for general lighting, heating/cooling, etc., excluding Agricultural Pumping Loads.



This Tariff shall also be applicable for use of electricity / power supply for Administrative Office / Time Office, Canteen, Recreation Hall / Sports Club / Health Club / Gymnasium / Swimming Pool exclusively meant for employees of the industry, lifts, water pumps, firefighting pumps, premises (security) lighting, etc. provided all such Administrative Office / Time Office, Canteen, Recreation Hall / Sports Club / Health Club / Gymnasium / Swimming Pool, lifts, water pumps, firefighting pumps, etc. are situated within the same industrial premises and supplied power from the same point of supply;

This Tariff shall also be applicable for use of electricity / power supply by an establishment covered under IT Industry and IT Enabled Services Policy of Government of Maharashtra as may be prevailing from time to time,

This Tariff shall also be applicable for use of electricity / power supply for (but not limited to following purpose):

- a) Flour Mill, Dal Mill, Rice Mill, Poha Mill, Masala Mills, Saw Mills, Powerlooms including other allied activities like, Warping, Doubling, Twisting, etc.
- b) Ice Factory, Ice- cream manufacturing units, Milk Processing / Chilling Plants (Dairy),
- c) Engineering workshops, Engineering Goods Manufacturing units, Printing Press, Transformer repairing workshops
- d) Mining, Quarry & Stone Crushing units;
- e) Garment Manufacturing units,
- f) LPG/CNG bottling plants, etc.
- g) Sewage Water Treatment Plant/ Common Effluent Treatment Plant owned, operated and managed by Industrial Association situated within industrial area only

Rate Schedule

Consumer Category	Fixed/Demand Charge	Energy Charge (Rs./kWh)
<b>LT V – Industrial</b>		
<b>(A) 0 - 20 kW (upto and including 27 HP)</b>	Rs. 190 per connection per month	5.06
<b>(B) Above 20 kW (above 27 HP)</b>	Rs. 130 per kVA per month	7.01
<b>ToD Tariffs (in addition to above base Tariffs) (in paise/kWh)</b>		
2200 Hrs-0600 Hrs		-100
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0
0900 Hrs-1200 Hrs		80
1800 Hrs-2200 Hrs		110

**Note:**

- a) The ToD Tariff is applicable for LT V (B) and optionally available to LT- V (A) having ToD meter installed.

**LT VI: LT- Street Lights****Applicability**

Applicable for use of Electricity / Power Supply at Low / Medium Voltage exclusively for the purpose of Street Light Services. This Tariff shall also be applicable for use of Electricity / Power Supply at Low / Medium Voltage for following (but not limited to) purposes, irrespective of whether such facilities are owned, operated and maintained by the local self Government body.

- a) Lighting in Public Garden (should be open for general public free of charge and, will not cover gardens in private township or amusement parks);
- b) Traffic Signals & Traffic Islands;
- c) State Transport Bus Shelters;
- d) Public Sanitary Conveniences;and
- e) Public Water Fountain & such other Public Places open for general public free of charge.

This category shall be applicable for public lighting for those streets which are open for use by the general public. Streets under residential complexes, commercial complexes, industrial premises, etc. will be billed under the Tariff of respective categories. This Tariff shall also be applicable even in case power supply has been released on High Tension for providing Street Light Services.

**Rate Schedule**

<b>Consumer Category</b>	<b>Fixed/Demand Charge (Rs per kW per month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>LT VI - Street Light</b>		
(A) Grampanchayat, A, B & C Class Municipal Council	40.00	4.12
(B) Municipal Corporation Areas	40.00	5.00

**Note:**

Street Lightings having 'Automatic Timers' for switching On/Off the street lights would be levied Demand Charges on lower of the following—

- a) 50 percent of 'Contract Demand' or
- b) Actual 'Recorded Demand'

**LT VII: LT-Temporary Supply**

Applicability**LT VII (A) – Temporary Supply Religious (TSR)**

Electricity supplied at Low/Medium Voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Moharam, Ram Lila, Chattrapati Shivaji Jayanti, Ambedkar Jayanti, Diwali, Christmas, Guru Nanak Jayanti, etc., or areas where community prayers are held, for a period of up to one (1) year.

**LT VII (B) - Temporary Supply Others (TSO)**

Electricity used at Low/Medium Voltage on a temporary basis for decorative lighting for exhibitions, circus, film shooting, marriages, etc. and any activity not covered under Tariff LT VII (A), for a period of up to one (1) year.

Electricity used at low / medium voltage on an emergency basis for purpose of fire fighting activity by the fire department in residential / other premises should be charged as per respective category of that premises. No Temporary Tariff shall be applied

Rate Schedule

<b>Consumption Slab (kWh)</b>	<b>Fixed/Demand Charge (Rs. Per connection per month)</b>	<b>Energy Charge (Rs./kWh)</b>
LT VII (A) – All Units	250.00	3.27
LT VII (B) – All Units	310.00	15.07

**Note:**

In case of LT VII (B), Additional fixed charges of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable

**LT VIII: LT - Advertisements and Hoardings**Applicability

Applicable for use of Electricity/ Power Supply at Low/ Medium Voltage for the purpose of advertisements, hoardings and other conspicuous consumption such as external flood light, displays, neon signs at departmental stores, malls, multiplexes, theatres, clubs, hotels and other such entertainment/leisure establishments except those specifically covered under LT-II as well as electricity used for the external illumination of monumental, historical/heritage buildings approved by MTDC, which shall be covered under LT-II category depending upon Sanctioned Load.

This Tariff is also applicable to small hoardings fixed on lamp posts/installed along road side

Rate Schedule

Consumption Slab (kWh)	Fixed / Demand Charge (Rs. Per connection per month)	Energy Charge (Rs./kWh)
Advertisements and hoardings (All Units)	500.00	20.77

**Note:**

The electricity, that is used for the purpose of indicating/displaying the name and other details of the shops or Commercial premises, for which electric supply is rendered, shall not be under LT VIII Tariff Category. Such usage of electricity shall be covered under the prevailing Tariff of such shops or commercial premises.

**LT IX: LT- Crematorium and Burial Grounds**Applicability

Applicable for use of Electricity/ Power Supply at Low/Medium Voltage in Crematorium and Burial Grounds for all purposes including lighting, and will be applicable only to the portion catering to such activities, and in case part of the area is being used for other commercial purposes, then a separate meter will have to be provided for the same, and the consumption in this meter will be chargeable under LT-II Commercial rates as applicable.

Rate Schedule

Consumption Slab (kWh)	Fixed/Demand Charge (Rs. per connection per month)	Energy Charge (Rs./kWh)
Crematorium & Burial (LT-IX) - All units	250.00	3.37

**LT X: LT- Public Services****(A) 0-20 kW**Applicability

This Tariff shall be applicable to education institutes, hospitals, dispensaries, primary health care centres, pathology laboratories, Police Stations, Post Offices, Defence establishments (army, navy and airforce), Public libraries and Reading rooms, Railway except traction (shops on the platforms/railway station/bus stands will be billed under Commercial category as per the respective slab), State transport establishments; Railway and State Transport

Workshops, Fire Service Stations, Jails, Prisons, Courts, Airports (only activities related to aeronautical operations)

Sports Club / Health Club / Gymnasium / Swimming Pool attached to the Educational Institution / Hospital provided said Sports Club / Health Club / Gymnasium / Swimming Pool is situated in the same premises and is exclusively meant for the students / patients of such Educational Institutions & Hospitals.

Rate Schedule

Consumption Slab (kWh)	Fixed/ Demand Charge (Rs./ month)	Energy Charge (Rs./kWh)
<b>(A) 0-20 kW</b>		
0-200 units	190.00	5.36
Above 200 units	190.00	7.88

**(B) >20 kW and ≤ 50 kW (C) >50 kW**

Applicability same as LT X (A) for supply to consumers with sanctioned demand in the range of >20 kW and ≤ 50 kW and >50 kW

Rate Schedule

Consumption Slab	Fixed/ Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>(B) &gt; 20 kW and ≤ 50 kW</b>	190.00	7.79
<b>(C) &gt; 50 kW</b>	190.00	8.24
<b>ToD Tariffs (in addition to above base Tariffs) (in paise/kWh)</b>		
2200 Hrs-0600 Hrs		-100
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0
0900 Hrs-1200 Hrs		80
1800 Hrs-2200 Hrs		110

**Note:**

The ToD Tariff is applicable for LT-X (B) and (C) category, and optionally available to LT-X (A) having ToD meter installed.

## HIGH TENSION (HT) – TARIFF

### HT I : HT- Industry

#### Applicability

This category includes consumers taking 3-phase electricity supply at High Voltage for industrial purpose. This Tariff shall also be applicable (but not limited to) for use of electricity / power supply for Administrative Office / Time Office, Canteen, Recreation Hall /Sports Club / Health Club / Gymnasium / Swimming Pool exclusively meant for employees of the industry, lifts, water pumps, firefighting pumps, premises (security) lighting, etc. provided all such Administrative Office / Time Office, Canteen, Recreation Hall / Sports Club / Health Club / Gymnasium / Swimming Pool, lifts, water pumps, firefighting pumps, etc. are situated within the same industrial premises and supplied power from the same point of supply;

This Tariff shall also be applicable for use of electricity / power supply by an establishment covered under IT Industry and IT Enabled Services Policy of Government of Maharashtra as may be prevailing from time to time.

This Tariff shall also be applicable to Research & Development units situated in the same premises of an industry and taking supply from the same point of supply. However R&D units situated at other place and taking supply from different point of supply shall be billed as per either HT (II) (A) or HT (II) (B) as the case may be;

This Tariff shall also be applicable for use of electricity / power supply for operating:

- Flour Mill, Dal Mill, Rice Mill, Poha Mill, Masala Mills, Saw Mills, Powerlooms including other allied activities like, Warping, Doubling, Twisting, etc.
- Ice Factory, Ice- cream manufacturing units, Milk Processing / Chilling Plants (Dairy),
- Engineering workshops, Engineering Goods Manufacturing units, Printing Press, Transformer repairing workshops
- Mining, Quarry & Stone Crushing units;
- Garment Manufacturing units,
- Sewage Water Treatment Plant/ Common Effluent Treatment Plant owned, operated and managed by Industrial Association situated within industrial area only.

#### Seasonal Industry

Applicable to Seasonal consumers, who are defined as "One who works normally during a part of the year up to a maximum of 9 months, such as Cotton Ginning Factories, Cotton Seed Oil Mills, Cotton Pressing Factories, Salt Manufacturers, Khandsari/Jaggery Manufacturing Units, or such other consumers who opt for a seasonal pattern of consumption, such that the electricity requirement is seasonal in nature.

Rate Schedule

<b>Consumer Category</b>	<b>Demand Charge (Rs./kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT I - Industry</b>		
Continuous Industry (on express feeder)	190.00	7.01
Non-continuous Industry (not on express feeder)	190.00	6.33
Seasonal Industry	190.00	7.79
<b>ToD Tariffs (in addition to above base Tariffs) (in paise/kWh)</b>		
2200 Hrs-0600 Hrs		-100
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0
0900 Hrs-1200 Hrs		80
1800 Hrs-2200 Hrs		110

Note:

- i. High Tension Industrial consumers having captive generation facility synchronised with the grid, will pay additional demand charges of Rs. 20/kVA/Month only on the extent of standby contract demand component and not on the entire Contract Demand (Standby Contract demand component).
- ii. Standby Charges will be levied on such consumers on the standby component, only if the consumer's demand exceeds the Contract Demand.
- iii. This additional Demand Charge will not be applicable, if there is no standby demand & the Captive Unit is synchronised with the Grid only for the export of power.
- iv. Only HT industries connected on express feeders and demanding continuous supply will be deemed as HT continuous industry and given continuous supply, while all other HT industrial consumers will be deemed as HT non-continuous industry.

**HT II: HT- Commercial**Applicability**HT II (A): EXPRESS FEEDERS**

Applicable for use of electricity / power supply at High Tension on Express Feeders in all non-residential, non-industrial premises and/or commercial premises for commercial consumption meant for operating various appliances used for purposes such as lighting,

heating, cooling, cooking, washing/cleaning, entertainment/leisure, pumping in following (but not limited to) places:

- a) Non-Residential, Commercial and Business premises, including Shopping Malls / Show Rooms;
- b) Film Studios, Cinemas and Theatres including Multiplexes, Hospitality, Leisure, Meeting / Town Halls and Places of Recreation & Public Entertainment;
- c) Offices including Government Offices, Commercial Establishments,;
- d) Marriage Halls, Hotels / Restaurants, Guest Houses, Internet / Cyber Cafes, Mobile Towers, Microwave Towers, Satellite Antennas used for telecommunication activity, Telephone Booths, Fax / Xerox Shops;
- e) Automobile, Any Other Type of Workshops, Petrol Pumps & Service Stations including Garages, Tyre Retreading / Vulcanizing units;
- f) Tailoring Shops, Computer Training Institutes, Typing Institutes, Photo Laboratories, Laundries;
- g) Printing Press,
- h) Banks, Telephone Exchanges, TV Station, Micro Wave Stations, All India Radio Stations,
- i) For common facilities, like Water Pumping / Street Lighting / Lifts / Fire Fighting Pumps // Premises (Security) Lighting, etc. in Commercial Complexes;
- j) Sports Club, Health Club, Gymnasium, Swimming Pool;
- k) External illumination of monumental / historical / heritage buildings approved by MTDC;
- l) Construction purposes
- m) Aquaculture, Sericulture, Fisheries, Cattle Breeding Farms;
- n) Research & Development units situated outside Industrial premises;
- o) Airports (only activities not related to aeronautical operations)

The Consumers belonging to HT II requiring a single point supply for the purpose of downstream consumption by separately identifiable entities will have to either operate through a franchisee route or such entities will have to take individual connections under relevant category. These downstream entities will pay appropriate Tariff as applicable as per MSEDCL Tariff Schedule, i.e., LT II.

### **HT II (B): NON- EXPRESS FEEDERS**

Applicability as per HT II (A)

#### Rate Schedule

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT II - Commercial</b>		
(A) Express Feeders	190.00	10.45



Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
(B) Non-express feeders	190.00	9.83
<b>ToD Tariffs (in addition to above base Tariffs) (in paise/kWh)</b>		
2200 Hrs-0600 Hrs		-100
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0
0900 Hrs-1200 Hrs		80
1800 Hrs-2200 Hrs		110

**HT III: HT - Railway Traction**Applicability

This Tariff is applicable for power supply to Railway Traction only.

Rate Schedule

Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>HT III - Railway Traction</b>	NIL	7.81

**HT IV: HT - Public Water Works and Sewage Treatment Plants**Applicability

Applicable for use of Electricity / Power Supply at high Voltage for pumping of water, purification of water & other allied activities related with Public Water Supply Schemes and Sewage Treatment Plants provided such Public Water Supply Schemes and Sewage Treatment Plants are owned, operated and managed by Local Self Government Bodies, like Gram Panchayat, Municipal Council, Municipal Corporation including Maharashtra Jeevan Pradhikaran, and cantonment boards;

Public Water Supply Schemes and Sewage Treatment Plants (including other allied activities) owned, operated and managed by any other Agency other than Local Self Government Body (excluding Maharashtra Jeevan Pradhikaran) shall not be eligible for HT IV Tariff and shall be billed as per either HT II (A) or HT II (B) or as the case may be, except those covered in HT I.

Rate Schedule

Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
<b>HT IV - Public Water Works</b>		
Express Feeders	190.00	5.05
Non- Express Feeders		4.73
<b>ToD Tariffs (in addition to above base Tariffs) (in paise/kWh)</b>		

Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./kWh)
2200 Hrs-0600 Hrs		-100
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0
0900 Hrs-1200 Hrs		80
1800 Hrs-2200 Hrs		110

### HT V: HT – Agricultural

#### Applicability

Applicable for Electricity / Power Supply at High Tension for pumping of water exclusively for the purpose of agricultural / cultivation of crops including HT Lift Irrigation Schemes (LIS) irrespective of ownership and also for

- (i) For pre-cooling plants & cold storage units for Agricultural Produce, irrespective of whether pre-cooling plants & cold storage units for Agricultural Produce are being used by farmers or traders, and irrespective of the ownership of such plants /units,
- (ii) For Poultry exclusively undertaking Layer & Broiler activities, including Hatcheries;
- (iii) For High Tech Agricultural (i.e. Tissue Culture, Green House, Mushroom activities), provided the power supply is exclusively utilized by such Hi-Tech Agriculture Consumers for purpose directly concerned with crop cultivation process and further provided that the power is not utilized for any engineering or industrial process;
- (iv) For Floriculture, Horticulture, Nurseries, Plantations, but shall not be applicable for Aquaculture, Sericulture, Fisheries, etc.
- (v) For Cane crusher and/or fodder cutter for self use for agricultural processing purpose, but shall not be applicable for operating a flour mill, oil mill or expeller in the same premises, either operated by a separate motor or change of belt drive;

#### Rate Schedule

Consumption Slab (kWh)	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./ kWh)
HT V - Agriculture (All Units)	30.00	2.88

### HT VI: Bulk Supply

#### Applicability

Applicable for consumers taking supply at HT voltages at single point for consumption within HT Residential Complexes, viz., Group Housing Societies, Colonies of industrial consumers and educational institutions, Government and Private Pure Residential Housing

Colonies, Government and Private Mix ( Residential + Commercial) Housing Colonies and Commercial Complexes only.

Rate Schedule

Consumer Category	Demand Charge (Rs./ kVA/ month)	Energy Charge (Rs./ kWh)
<b>HT VI Bulk Supply</b>		
Group Housing Society	160.00	4.82
Commercial Complex		8.21

**Note:**

- i. Demand Charges as above will however be applicable only when the power supply to such Residential/Commercial Complexes is given through independent point of supply. In case of mixed complexes, use of sub-meters is essential for arriving at energy charges for type of category. HT VI Tariff will be applicable only for Group Housing Societies and Colonies of industrial consumers and educational institutions.
- ii. MSEDCL is directed to ensure metering arrangements so that consumers currently classified under HT-VI Commercial Category, and requiring a single point supply, will have to either operate through a franchisee route or take individual connections under relevant category.

**HT VIII - HT - Temporary Supply**

Applicability

**HT VIII (A) – Temporary Supply Religious (TSR)**

Electricity supplied at high Voltage for temporary purposes during public religious functions like Ganesh Utsav, Navaratri, Eid, Moharam, Ram Lila, Chattrapati Shivaji Jayanti, Ambedkar Jayanti, Diwali, Christmas, Guru Nanak Jayanti, etc., or areas where community prayers are held, for a period of up to one (1) year.

**HT VIII (B) - Temporary Supply Others (TSO)**

Electricity used at high Voltage on a temporary basis for decorative lighting for exhibitions, circus, film shooting, marriages, etc. and any activity not covered under Tariff LT VII (A), for a period of up to one (1) year.

Electricity used at high voltage on an emergency basis for purpose of fire fighting activity by the fire department in residential / other premises should be charged as per respective category of that premises. No Temporary Tariff shall be applied

Rate Schedule

<b>Consumption Slab (kWh)</b>	<b>Fixed/Demand Charge (Rs. Per connection per month)</b>	<b>Energy Charge</b>
HT VIII (A) – Temporary supply religious	250.00	3.27
HT VIII (B) – Temporary supply others	250.00	12.82

**Note:**

Additional fixed charges of Rs. 150 per 10 kW load or part thereof above 10 kW load shall be payable.

**HT IX - Public Services****Applicability**

This Tariff shall be applicable to education institutes, hospitals, dispensaries, primary health care centres, pathology laboratories, Police Stations, Post Offices, Defence establishments (army, navy and airforce), Public libraries and Reading rooms, Railway except traction (shops on the platforms/railway station/bus stands will be billed under Commercial category as per the respective slab), State transport establishments; Railway and State Transport Workshops, Fire Service Stations, Jails, Prisons, Courts; Airports (only activities related to aeronautical operations)

Sports Club / Health Club / Gymnasium / Swimming Pool attached to the Educational Institution / Hospital provided said Sports Club / Health Club / Gymnasium / Swimming Pool is situated in the same premises and is exclusively meant for the students / patients of such Educational Institutions & Hospitals.

Rate Schedule

<b>Consumer Category</b>	<b>Demand Charge (Rs./ kVA/ month)</b>	<b>Energy Charge (Rs./kWh)</b>
<b>HT Public services</b>		
(A) Express Feeders	190.00	8.21
(B) Non-express feeders	190.00	7.65
<b>ToD Tariffs (in addition to above base Tariffs) (in paise/kWh)</b>		
2200 Hrs-0600 Hrs		-100

0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0
0900 Hrs-1200 Hrs		80
1800 Hrs-2200 Hrs		110

## MISCELLANEOUS AND GENERAL CHARGES

### Fuel Adjustment Cost (FAC) Charges

The FAC charge will be determined based on the approved Formula and relevant directions, as may be given by the Commission from time to time and will be applicable to all consumer categories for their entire consumption. The FAC Formula takes into account any change in the cost of own generation and power purchase due to variations in the fuel cost. Fuel Price shall mean the landed cost of fuel at power station battery limits and will consist of only following components:

- a) Basic Fuel Price including statutory taxes, duties, royalty as applicable
- b) Transportation (freight) cost by rail/road/pipeline or any other means including transportation service charges for bringing fuel up to the Power Station boundary.
- c) Fuel Treatment Charges such as washing / cleaning charges, Sizing Crushing Charges, Fuel Analysis Charges, etc. for making fuel up to the required grade / quality
- d) Fuel Handling Charges, including that towards loading and unloading charges for bringing fuel to the power station boundary.

Besides above, the Commission specifies a ceiling on 'transportation service charge', at 2% of the freight charge.

The FAC charge shall be computed and levied/refunded, as the case may be, on a monthly basis. The following Formula shall be used for computing FAC:

$$\text{FAC} = \text{C} + \text{I} + \text{B} \text{ where,}$$

$$\text{FAC} = \text{Total Fuel Cost and Power Purchase Cost Adjustment}$$

$$\text{C} = \text{Change in cost of own generation and power purchase due to variation in the fuel cost,}$$

$$\text{I} = \text{Interest on Working Capital,}$$

$$\text{B} = \text{Adjustment Factor for over-recovery/under-recovery.}$$

The details for each month shall be available on MSEDCL website at [www.mahadiscom.in](http://www.mahadiscom.in).

The FAC will be charged on a monthly basis in proportion to the variable charges of each category/consumption slab, and the details of the computation and recovery for the same will be submitted to the Commission for post-facto approval, on a quarterly basis.

### Electricity Duty

The Electricity Duty and Tax on Sale of Electricity will be charged in addition to charges levied as per the Tariffs mentioned hereunder (as approved by the Commission) as per the Government guidelines from time to time. However, the rate and the reference number of the Government Resolution/ Order vide which the Electricity Duty and Tax on Sale of Electricity is made effective, shall be stated in the bill. A copy of the said Resolution/Order shall be made available on MSEDCL website at [www.mahadiscom.in](http://www.mahadiscom.in).

### Power Factor Calculation

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

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

$$\text{Wherein the kVAh is} = \sqrt{\sum (kWh)^2 + \sum (RkVAh)^2}$$

(i.e., Square Root of the summation of the squares of kWh and RkVAh )

Power Factor Penalty (Applicable for HT I, HT II, HT IV, HT V, HT VI and HT IX categories, as well as LT II (B), LT II (C), LT III, LT V (B), LT X (B) and LT X (C) categories)

Whenever the average power factor is more than 0.95, an incentive shall be given at the rate of the following percentages of the amount of the monthly bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Incentive
1	0.951 to 0.954	0.95	0%
2	0.955 to 0.964	0.96	1%
3	0.965 to 0.974	0.97	2%
4	0.975 to 0.984	0.98	3%
5	0.985 to 0.994	0.99	5%
6	0.995 to 1.000	1.00	7%

**Note:**

PF to be measured/computed upto 3 decimals, after universal rounding off

Power Factor Penalty (Applicable for HT I, HT II, HT IV, HT V, HT VI and HT IX categories, as well as LT II (B), LT II (C), LT III, LT V (B), LT X (B) and LT X (C) categories)

Whenever the average PF is less than 0.9, penal charges shall be levied at the rate of the following percentages of the amount of the monthly bill including energy charges, reliability charges, FAC, and Fixed/Demand Charges, but excluding Taxes and Duties:

Sl.	Range of Power Factor	Power Factor Level	Penalty
1	0.895 to 0.900	0.90	0%
2	0.885 to 0.894	0.89	2%
3	0.875 to 0.884	0.88	3%
4	0.865 to 0.874	0.87	4%
5	0.855 to 0.864	0.86	5%
6	0.845 to 0.854	0.85	6%
7	0.835 to 0.844	0.84	7%
8	0.825 to 0.834	0.83	8%
9	0.815 to 0.824	0.82	9%
10	0.805 to 0.814	0.81	10%
...	...	...	...

**Note:**

PF to be measured/computed upto 3 decimals, after universal rounding off

**Prompt Payment Discount**

A prompt payment discount of one percent on the monthly bill (excluding Taxes and Duties) shall be available to the consumers if the bills are paid within a period of 7 days from the date of issue of the bill, or within 5 days of the receipt of the bill, whichever is later.

Delayed Payment Charges (DPC)

In case the electricity bills are not paid within the due date mentioned on the bill, delayed payment charges of 2 percent on the total electricity bill (including Taxes and Duties) shall be levied on the bill amount. For the purpose of computation of time limit for payment of bills, "the day of presentation of bill" or "the date of the bill" or "the date of issue of the bill", etc. as the case may be, will not be excluded.

Rate of Interest on Arrears

The rate of interest chargeable on arrears will be as given below for payment of arrears-

Sl.	Delay in Payment ( months)	Interest Rate per annum (%)
1	Payment after due date up to 3 months ( 0-3)	12
2	Payment made after 3 months and before 6 months (3-6)	15
3	Payment made after 6 months (>6)	18

Load Factor Incentive

Consumers having load factor over 75% upto 85% will be entitled to a rebate of 0.75% on the energy charges for every percentage point increase in load factor from 75% to 85%. Consumers having a load factor over 85 % will be entitled to rebate of 1% on the energy charges for every percentage point increase in load factor from 85%. The total rebate under this head will be subject to a ceiling of 15% of the energy charges for that consumer. This incentive is limited to HT I and HT II categories only. Further, the load factor rebate will be available only if the consumer has no arrears with MSEDCL, and payment is made within seven days from the date of the bill. However, this incentive will be applicable to consumers where payment of arrears in instalments has been granted by MSEDCL, and the same is being made as scheduled. MSEDCL has to take a commercial decision on the issue of how to determine the time frame for which the payments should have been made as scheduled, in order to be eligible for the Load Factor incentive.

The Load Factor has been defined below:

$$\text{Load Factor} = \frac{\text{Consumption during the month in MU}}{\text{Maximum Consumption Possible during the month in MU}}$$

Maximum consumption possible = Contract Demand (kVA) x Actual Power Factor  
x (Total no. of hrs during the month less planned load shedding hours\*)

\* - Interruption/non-supply to the extent of 60 hours in a 30 day month has been built in the scheme.

In case the billing demand exceeds the contract demand in any particular month, then the load factor incentive will not be payable in that month. (The billing demand definition excludes the demand recorded during the non-peak hours i.e. 22:00 hrs to 06:00 hrs and therefore, even if the maximum demand exceeds the contract demand in that duration, load factor incentives



would be applicable. However, the consumer would be subjected to the penal charges for exceeding the contract demand and has to pay the applicable penal charges).

#### Penalty for exceeding Contract Demand

In case, a consumer (availing Demand based Tariff) exceeds his Contract Demand, he will be billed at the appropriate Demand Charge rate or the Demand actually recorded and will be additionally charged at the rate of 150% of the prevailing Demand Charges (only for the excess Demand over the Contract Demand).

In case any consumer exceeds the Contract Demand on more than three occasions in a calendar year, the action taken in such cases would be governed by the Supply Code.

#### Additional Demand Charges for Consumers having Captive Power Plant

For customers having Captive Power Plant (CPP), the additional demand charges would be at a rate of Rs. 20/ kVA/month only on extent of Stand-by demand component, and not on the entire Contract Demand. Additional Demand Charges will be levied on such consumers on the Stand-by component, only if the consumer's demand exceeds the Contract Demand.

#### EHV supply rebate

Consumers availing supply at Extra High Voltage (66 kV and above) will be given a rebate of 3% on Energy Charges. Further, the EHV supply rebate will be available only if the consumer has no arrears with MSEDCL. However, this rebate will be applicable to consumers where payment of arrears in installments has been granted by MSEDCL, and the same is being made as scheduled. MSEDCL has to take a commercial decision on the issue of how to determine the time frame for which the payments should have been made as scheduled, in order to make the consumer eligible for the EHV supply rebate.

#### Security Deposit

- 1) Subject to the provisions of sub-section (5) of Section 47 of the Act, the Distribution Licensee may require any person to whom supply of electricity has been sanctioned to deposit a security in accordance with the provisions of clause (a) of sub-section (1) of Section 47 of the Electricity Act, 2003.
- 2) The amount of the security shall be an equivalent of the average of three months of billing or the billing cycle period, whichever is lesser. For the purpose of determining the average billing, the average of the billing to the consumer for the last twelve months, or in cases where supply has been provided for a shorter period, the average of the billing of such shorter period, shall be considered:

Provided that in the case of seasonal consumers, the billing for the season for which supply is provided shall be used to calculate the average billing.

- 3) Where the Distribution Licensee requires security from a consumer at the time of commencement of service, the amount of such security shall be estimated by the Distribution Licensee based on the Tariff category and contract demand / sanctioned load, load factor, diversity factor and number of working shifts of the consumer.
- 4) The Distribution Licensee shall re-calculate the amount of security based on the actual billing of the consumer once in each financial year.
- 5) Where the amount of security deposit maintained by the consumer is higher than the security required to be maintained under MERC (Supply Code) Regulation, 2005, the Distribution Licensee shall refund the excess amount of such security deposit in a single payment:

Provided that such refund shall be made upon request of the person who gave the security and with an intimation to the consumer, if different from such person, shall be, at the option of such person, either by way of adjustment in the next bill or by way of a separate cheque payment within a period of thirty (30) days from the receipt of such request:

Provided further that such refund shall not be required where the amount of refund does not exceed the higher of ten (10) per cent of the amount of security deposit required to be maintained by the consumer or Rupees Three Hundred.

- 6) Where the amount of security re-calculated pursuant as above, is higher than the security deposit of the consumer, the Distribution Licensee shall be entitled to raise a demand for additional security on the consumer.  
Provided that the consumer shall be given a time period of not less than thirty days to deposit the additional security pursuant to such demand.

- 7) Upon termination of supply, the Distribution Licensee shall, after recovery of all amounts due, refund the remainder amount held by the Distribution Licensee to the person who deposited the security, with an intimation to the consumer, if different from such person.
- 8) A consumer - (i) with a consumption of electricity of not less than one lac (1,00,000) kilowatt hours per month; and (ii) with no undisputed sums payable to the Distribution Licensee under Section 56 of the Act may, at the option of such consumer, deposit security, by way of cash, irrevocable letter of credit or unconditional bank guarantee issued by a scheduled commercial bank.

- 9) The Distribution Licensee shall pay interest on the amount of security deposited in cash (including cheque and demand draft) by the consumer at a rate equivalent to the bank rate of the Reserve Bank of India:

Provided that such interest shall be paid where the amount of security deposited in cash under the Regulation 11 of Supply Code of is equal to or more than Rupees Fifty.

- 10) Interest on cash security deposit shall be payable from the date of deposit by the consumer till the date of dispatch of the refund by the Distribution Licensee.

### **Definitions:**

**Billing Demand for LT Consumer Categories**

Billing Demand for LT II (B), LT II (C), LT III, LT V (B), LT X (B) and LT X (C) 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

**Note:**

- Demand registered during the period 0600 to 2200 hrs. will only be considered for determination of the Billing demand.
- In case of change in Contract Demand, the period specified in Clause (a) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

**Billing Demand for HT Consumer Categories**

Billing Demand for HT I, HT II, HT III, HT IV, HT V, HT VI, HT VII and HT IX)

Monthly Billing Demand will be the higher of the following:

- iv. Actual Maximum Demand recorded in the month during 0600 hours to 2200 hours
- v. 75% of the highest billing demand recorded during the preceding eleven months, subject to the limit of Contract Demand
- vi. 50% of the Contract Demand.

**Note:**

- Demand registered during the period 0600 to 2200 hrs will only be considered for determination of the Billing demand.
- In case of change in Contract Demand, the period specified in Clause (i) above will be reckoned from the month following the month in which the change of Contract Demand takes place.

**HT Seasonal Category (HT I)**

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

- i. 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

The Billing Demand for the consumers with CPP will be governed as per the CPP Order in case No. 55 and 56 of 2003

#### Contract Demand

Contract Demand means demand in Kilowatt (kW) / Kilo –Volt Ampere (kVA), mutually agreed between MSEDCL and the consumer as entered into in the agreement or agreed through other written communication (For conversion of kW into kVA, Power Factor of 0.80 shall be considered).

#### Sanctioned Load

Sanctioned Load means load in Kilowatt (kW) mutually agreed between MSEDCL and the consumer.

In case the meter is installed on the LV/MV side, the methodology to be followed for billing purpose is as follows

- 2% to be added to MV demand reading, to determine the kW or kVA billing demand, and
- 'X' units to the MVA reading to determine the total energy compensation to compensate the transformation losses, where is calculated as follows  
$$'X' = (730 * \text{kVA rating of transformer})/500 \text{ Units/month, to compensate for the iron losses, plus one percent of units registered on the LT side for copper losses.}$$

## Appendix I: List of Persons who attended the Technical Validation Session

Sr. No.	Name
1	Shri Ajoy Mehta, Managing Director, MSEDCL
2	Shri D D Wavhal, Director (Finance), MSEDCL
3	Shri A J Deshpande, MSEDCL
4	Shri S V Bapat, MSEDCL
5	Shri M M Digraskar, MSEDCL
6	Shri S S Katkar, MSEDCL
7	Shri S S Dhande, MSEDCL
8	Shri R G Sonawane, MSEDCL
9	Shri C B Mankar, MSEDCL
10	Shri A S Chavan, MSEDCL
11	Shri R S Sangle, MSEDCL
12	Shri M S Kele, MSEDCL
13	Mrs. S V Vyavahare, MSEDCL
14	Shri M K Deore, MSEDCL
15	Shri S M Bhoyar, MSEDCL
16	Shri A N Kelkar, MSEDCL
17	Shri Rajesh S Kurai, MSEDCL
18	Smt. Ashwini Chitnis, Prayas Energy Group, authorized consumer representative
19	Dr. Ashok Pendse, TBIA, authorized consumer representative
20	Dr. S L Patil, TBIA, authorized consumer representative
21	Shri Ashish S Chandrana, authorized consumer representative
22	Shri Anil Kelkar, authorized consumer representative
23	Shri Sidhdharth Verma, authorized consumer representative
24	Shri Hemant Kapadia, authorized consumer representative
25	Shri Kiran Paturkar, authorized consumer representative

## Appendix II: List of objectors at Public Hearings

### Amravati Division

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Shri Kiran Paturkar, Federation of Industries Association Vidarbha
2	Shri Ashish Subhash Chandarana, AKOT
[B]	Representative of Public
3	Shri Anandrao Adsul, Member of Parliament
4	Shri Anantrao Gudhe, Ex Member of Parliament
[C]	Objections / Suggestions by Consumers
5	Shri Shripad Kulkarni, Vidarbha Chamber of Commerce & Industry,
6	Shri Manjit Deshmukh, Zilla Veej Grahak Sangh, Shivkrupa, Khetan Nagar, Akola
7	Er. Kawish Dange, Subordinate Engineers' Association, Amravati
8	Shri Anil Harichandra Vyas, Shivaji Ves, Khamgaon Dist. Buldana
9	Shri R.B. Agrawal, Opp. Sarafa Post Office, Khamgaon Dist. Buldana
10	Akot MIDC Industries Association,
11	M/s Patni Cold Storage & Food Processing Industries,
12	Maharashtra Rajya Kapus Panan Mahasangh Karmchari Shetkari Sahakari Soot Girni Ltd,
13	Shri Chandrasen Wankhade, At Post. Karla, Tal. Anjangaon, Dist. Amravati
14	Shri Om Bhandari
15	Shri Munna Rathod
16	Shri Vijay Malokar
17	Shri Pradip Bajad
18	Shri Pramod D. Pande
19	Shri Vijay Nagpure
20	Shri Subhash S. Vasu
21	Shri Ramesh Nandurkar

### Nagpur Division

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Vidarbha Industries Association, Nagpur
[B]	Objections / Suggestions by Consumers
2	Sahakar Maharshi Swargiya Bapuraoji Deshmukh Shetkari Sahakari Soot Girni Ltd.
3	Vidarbha Cold Storage Association, Nagpur
4	Vidarbha colour Lab owners' Association , Nagpur
5	Atharvaraj Hatcheries., Dist. Wardha
6	Credai-Nagpur Metro, Nag Vidarbha Builders Association,
7	Lloyds Steel Ind. Ltd. Bhugaon Link Road, Wardha
8	Shri N. B. Rohankar, Subordinate Engineers Association

Sr. No.	Name of the Objector
9	Shri Sanjay Dharmadhikari
10	Shri Machendra Jichkar
11	Shri S. R. Patwardhan
12	Shri Uday Kant, Yesh Agro Energy
13	Shri Madhukar Kishor Wamanrao Mute, Akhil Bhartiya Grahak Panchayat, Wardha Zilha Veej Samiti
14	Shri Raja Laharia
15	Shri Pramod Shrihari Patil, Vidharbha Transformer Repairer & Manufacture Association
16	Shri Sudhir Paliwal, Vidharbha Environmental Action Group
17	Vidharbha Cold Storage Association
18	Shri John Thomas
19	Shri Ravindra Kaskhedikar, Janakrsoh.

### Aurangabad Division

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Shri Hemant Kapadia, Aurangabad
[B]	Objections / Suggestions by Consumers
2	Urja Sahayog, Aurangabad
3	Khadkeshwar Hatcheries Pvt. Ltd., Aurangabad
4	Navjeevan Hatcheries Pvt. Ltd. Aurangabad
5	Shri Ajay B Lahane, Briquetting Plant owner's, Aurangabad
6	Iqbal Najam, , Aurangabad
7	Shri Syed Zahiruddin, Maharashtra Rajya Vidyut Tantrik Kamgar Sanghatana
8	Dr. Uday Girdhari, Marathwada Association of Small Scale Industries & Agriculture
9	Shri Narayan Pawar, Marathwada Association of Small Scale Industries & Agriculture
10	Shri Santosh Kulkarni, Marathwada Association of Small Scale Industries & Agriculture
11	Shri Sunil Bhosale, Marathwada Association of Small Scale Industries & Agriculture
12	Shri Prasad Kokil, Urja Manch
13	Shri K. K. Jadiya
14	Shri Madhukar Vaidya
15	Shri Paras Tated, Transformer Repairers Association of Maharashtra
16	Shri Purshottam S Navander
17	Shri D. B. Soni
18	Shri Nitin R. Karba
19	Shri Ashok Bhatpude

Sr. No.	Name of the Objector
20	Shri Shivtaran Mundada

### Nashik Division

Sr. No.	Name of the Objector
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Shri Siddharth Varma (Soni), Nasik
[B]	Objections / Suggestions by Consumers
2	Major P. M. Bhagat (Veteran)
3	Shri Milind Chincholikar, Nasik Industries & Manufactures' Association
4	Shri N.S. Nadkarni, Herald Engineers, Nasik
5	Loknayak Jaiprakash Narayan Shetkari Sah. Soot Girni Ltd.
6	Shri Dadapatil K. Vidya, Sangamner
7	Shri T. N. Agrawal, T. N. Agrawal & Co.
8	Shri Satish Shah
9	Shri Ansari Momin, Julaha Powerloom Conference
10	Shri Baburao D. Khadgil, Shree Saibaba Sansthan Vishwastvyavashta, Shirdi
11	Jawahar Shetkari Sah. Soot Girni Ltd.
12	Shri Jayant Shankarlal Mutha, Pimpalgaon Baswant
13	Shri Sham Patil, Maharashtra Veej Grahak Sanghatan, Dhule
14	Shri Nilesh B. Rohankar, Subordinate Engineers Association, Nashik
15	Shri Anupam D Ghosh, Nashik Ispat Pvt. Ltd.
16	Shri S. R. Nargolkar, Association of the Managements of Un-aided engineering Colleges
17	Shri Sandip Hedlekar, Omkar Hatcheries
18	Shri Anand Cold Storage & Agro Products
19	Adv. Anil Chavan
20	Shri Purushottam S Navander, Ahmadnagar
21	Smt. Yogita Amrutkar
22	Shri Vilas Devale, Nashik Jilha Grahak Panchayat
23	Shri I. A. Rajput, Jalgaon Energy Pvt. Ltd.
24	Shri Ramesh K. Pawar, Nashik Municipal Corporation
25	Shri Suresh Nikumbh, Patrakar, Tiranga
26	Shri Ashok Sonawane
27	Shri Vikasrao Ramchandra Kawade
28	Shri Shrikrishna Shirode

### Pune Division

Sr. No.	Name of the Objector
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<b>Sr. No.</b>	<b>Name of the Objector</b>
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Smt. Ashwini Chitnis, Prayas Energy Group
2	Shri Anil Kelkar
[B]	Objections / Suggestions by Consumers
3	Shri Sarang Sathe, Pune
4	Shri Vivek Velankar, Sajag Nagrik Manch, Pune
5	Sahyadri Sahakari Sakhar Karkhana Ltd. Yashwant Nagar
6	Shri Pratap Hogade ,Maharashtra Veej Grahak Sanghtana, Ichalkaranji
7	Shri Jawed Momin, Janata Dal (Secular), Maharashtra, Mumbai
8	Shri Sayaji Patil, Shri Umeshwar Sahakari Pani Purvatha Sanstha Maryadit, Umbraj Tal. Karad
9	Shri Naikba Sahakari Pani Purvatha Sanstha Maryadit, Bholewadi
10	Shri Koteswar Sahakari Pani Purvatha Sanstha Maryadit, Korti
11	Shri Jyotirling Sahakari Upsa Jalsinchan Sanstha Ltd., Kiroli
12	Shri Bhagyalaxmi Sahakari Pani Purvatha Sanstha Ltd., Aarewadi-Gamewadi-Delewadi
13	Shri Jyotirling Sahakari Pani Purvatha Sanstha Ltd., Charegoan
14	Shri Chandrasen Sahakari Pani Purvatha Sanstha Ltd., Vasantgad, Sakurdi, Aabaichiwaadi
15	Shriram Sahakari Upsa Jalsinchan Sanstha Ltd., Talbeed
16	Shri S. K. Banerjee, Pune
17	Deendayal Magasvargiya Sahakari Soot Girni Ltd., Deendayal Nagar, Waghwadi,
18	Shri Sachin Eknath More, Pune
19	The Ichalkaranji Co-op. Spinning Mills Ltd., Shivanakwadi
20	Vita Yantramag Audyogik Sahakari Sangh Ltd, Vita
21	Commander Solanki, Military Engineer Services., Lonavla
22	Commander Solanki, INS Shivaji, Lonavla
23	Shetkari Sahakari Soot Girni Ltd., Sangole
24	Shri Ashok Patil, Maharashtra Rajya Irrigation Federation, Kolhapur
25	Shetkari Vinkari Sah. Soot Girni Ltd., Islampur
26	Vedant Tapioca Pvt. Ltd., Bedag
27	Koyana Industrial Sahakari Vasahat Ltd., Karad
28	Perfect Plastics, Satara
29	Manufacturers Association of Satara, Satara
30	Hutatma Swami-Varke Sahakari Soot Girani Ltd., Mudal.
31	Cyclo Motors Ltd, Pune
32	Asuvara Pikals and Spyses Industries, Satara
33	Amity Fabritech, Satara
34	Nav Maharashtra Sah. Soot Girni Ltd., Sajani, Ichalkaranji
35	Shankarrao Mohite Sah. Soot Girni Ltd, Akluj (Pisewadi)
36	Shri Ashok Magdum, Sangli Tasgaon Cold Storage Association, Kupwad.
37	Shiroli Manufacturer's Association, Kolhapur P-12, Smak Building, MIDC Area Shiroli, Kolhapur - 416 122
38	Mahatma Phule Anu. Jati Jamati Shet Sah. Soot Girni Niy. Wagholi, Solapur
39	Shri Vasant Thorat, Balkrishna Hatcheries, Miraj
40	Quality Poultry Products Pvt. Ltd., Miraj

Sr. No.	Name of the Objector
41	Peeth Girni Malak Mahasangh, Sangameshwar
42	Aamikie Engineering Pvt. Ltd., Satara
43	Akashganga Constructional Machines Pvt Ltd, Satara
44	Ajinkya Electronic Systems, Satara
45	Bartakke Electrofab Pvt. Ltd., Satara
46	Rajas Engineering, Satara
47	Swastik Industries, Satara
48	Kolhapur Zilla Sah. Pani Purvatha Sansthacha Sah. Sangh Ltd., Kolhapur
49	Tengart Plastics Machine Shop Division, Satara
50	Beacon Gear Transmission (P) Ltd., Satara
51	M/s Shree Components., Satara
52	Grahak Panchayat Maharashtra, Nimgaon Ketaki, Indapur
53	Precise Tools, Satara
54	Aaditya Engineering Works, Satara
55	Kanchan Engineers, Satara
56	Deshmukh Udyog, Satara
57	Gokul Shirgaon Manufacturers Association, Kolhapur
58	Wai Taluka Sahakari Soot Girani Ltd., Satara
59	Shivam Engineering Works, Satara
60	Pudumjee Pulp & Paper Mills Ltd. Thergaon, Pune
61	Sagareswar Sahakari Soot Girni Ltd. Kadegaon, Sangli
62	Kumbheshwar Enterprises, Satara
63	Krishna Verala Magaswargiya Sah. Soot Girni Ltd., Palus, Sangli
64	Shri S R Nargolkar, Association of the Hospital in Pune
65	Venky's (India) Ltd., Pune
66	Venkateshwara Research & Breeding Farm Pvt. Ltd., Pune
67	Venkateshwara Hatcheries Pvt. Ltd., Pune
68	Food Processor's Cold Storer's & Reefer Transporter's Association, Pune
69	Shri Rahul B Mhaske, Monsoon Agro Bio Ltd., Pune
70	Vidyut Urja Equipments Pvt. Ltd., Pune
71	Akhil Bharatiya Grahak Panchayat, Pune
72	Shri Uday Deshpande, Tata Motors Limited, Pimpri Pune
73	Samarth Foundry Services Pvt. Ltd., Hatkanangale, Dist. Kolhapur
74	Paras Founders, Hatkanangale, Dist. Kolhapur
75	Param Industries, Hatkanangale, Dist. Kolhapur
76	Swaraj Tiels, Hatkanangale, Dist. Kolhapur
77	Vimal Engineering Works, Hatkanangale, Dist. Kolhapur
78	Shri Padmavati Cnc Engineers, Hatkanangale, Dist. Kolhapur
79	Gargi Magna Steel chem. Pvt. Ltd., Hatkanangale, Dist. Kolhapur
80	Dilip Ghansham Biyani, Hatkanangale, Dist. Kolhapur
81	Indiana General Engineering Works, Hatkanangale, Dist. Kolhapur
82	Shreyash Industries, Hatkanangale, Dist. Kolhapur
83	M/s Unique Concrete Industries, Hatkanangale, Dist. Kolhapur
84	Shri Vijaykumar Tulsiram Vyas, Hatkanangale, Dist. Kolhapur
85	Ganga Industries, Hatkanangale, Dist. Kolhapur
86	Magna Industries, Hatkanangale, Dist. Kolhapur

<b>Sr. No.</b>	<b>Name of the Objector</b>
87	Tirupati Packaging Pvt. Ltd., Hatkanangale, Dist. Kolhapur
88	Jain Packaging Industries, Hatkanangale, Dist. Kolhapur
89	Manik Steel Re Rolling Pvt. Ltd., Hatkanangale, Dist. Kolhapur
90	Flowwhite Chemicals Pvt. Ltd., Hatkanangale, Dist. Kolhapur
91	Arjunsingh Mohite Patil, Hatkanangale, Dist. Kolhapur
92	Shri Hanuman Industrial Estate, Hatkanangale, Dist. Kolhapur
93	MD Alloys, Hatkanangale, Dist. Kolhapur
94	Om Cast Cleaners, Hatkanangale, Dist. Kolhapur
95	Malati Founders Pvt. Ltd, Hatkanangale, Dist. Kolhapur
96	Malati Enterprises, Hatkanangale, Dist. Kolhapur
97	Kolhapur Engineering Association, Kolhapur
98	Chaitanya Engineer Works, Hatkanangale, Dist. Kolhapur
99	Polygon Product Solutions, Hatkanangale, Dist. Kolhapur
100	Excel Industries, Hatkanangale, Dist. Kolhapur
101	Rohit Textiles, (Awade Textiles),
102	Vaishali Textiles, (Awade Textiles),
103	Kishori Textiles, (Awade Textiles),
104	Shri Mr. S D Damle, Pune
105	Shri B.G. Sheth, Bharat Enterprises, Satara
106	Kaysons Plasto Print Industries, Satara
107	Atharva Ropes, Satara
108	Jay Bhawani Steel Works, Satara
109	Planet Home Décor Pvt. Ltd., Satara
110	Dwip Industries, Satara
111	Deep Fittings, Satara
112	Star Enterprises, Satara
113	Spepurmac Engineering Services, Satara
114	Eleqant Engineering, Satara
115	Excel Plinmoc Industries, Satara
116	Sai Industries, Satara
117	Sai Associates, Satara
118	M/s R R Insulators, Satara
119	Bharat Forge Limited, Mundhwa, Pune
120	Maharashtra Scooters Ltd., Satara
121	Yashwantrao Chavan Sahakari Pani Purvatha Sanstha Maryadit, Shirgaon
122	Shri Satish Kotgi, The Ichalkaranji Powerloom Weaver's Co-op. Association Ltd., Ichalkaranji
123	Balkrishna Livestock Breeders Pvt. Ltd., Wanlesswadi
124	Balkrishna Breeding Farms Pvt. Ltd., Wanlesswadi
125	Shri Narendra Wagh, Mahanagarpalika Commissioner Office, Pune
126	M/s Padmavati Plastics, Hatkanangale, Kolhapur
127	Smt. Sushiladevi M. Lalvani, Tilavani
128	Smt. Kavita A. Lalvani, Tilavani
129	Smt. Dimpal V. Lalvani, Tilavani
130	Mahesh Textile Processors, Hatkanangale
131	Pro. Shri Manikchand V.Lalvani, Tilvani

Sr. No.	Name of the Objector
132	Mahalaxmi Co-op Yarn Processors Ltd., Hatkanangale
133	Pro. Shri Vivek M. Lalvani, M/s. Vivek Textile Agency, Tilwani
134	Powercraft Electronics Pvt. Ltd., Hatkanangale, Dist. Kolhapur
135	M/s Net Mech Founders Pvt. Ltd., Hatkanangale, Dist. Kolhapur
136	Autoline, Hatkanangale, Dist. Kolhapur
137	R.K. Packaging, Hatkanangale, Dist. Kolhapur
138	M/s Arvind Doublers, Hatkanangale, Dist. Kolhapur
139	Samarth Metallurgicals, Hatkanangale, Dist. Kolhapur
140	Balaji Metallic Foundry, Hatkanangale, Dist. Kolhapur
141	Bakliwal Textile Pvt. Ltd., Hatkanangale, Dist. Kolhapur
142	Shree Leela Ind., Hatkanangale, Dist. Kolhapur
143	United Thermocoats, Hatkanangale, Dist. Kolhapur
144	Kolhapur Rubber Factory, Hatkanangale, Dist. Kolhapur
145	Sun Fab Poly Tex, Ichalkaranji
146	Filtech Foams, Hatkanangale, Dist. Kolhapur
147	Mutha Spherocast (India) Pvt. Ltd., Satara
148	Dhanashree Industries, Satara
149	Adonitech, Satara
150	Rhishi Tools, Satara
151	Mutha Engineering (P) Ltd., Satara
152	Technovision Auto Components Pvt. Ltd., Hatkanangale, Dist. Kolhapur
153	Black Rose Ind. Ltd., Hatkanangale, Dist. Kolhapur
154	Shriniwas Industries, Hatkanangale, Dist. Kolhapur
155	Purav Industries, Hatkanangale, Dist. Kolhapur
156	Sam Polymers, Hatkanangale, Dist. Kolhapur
157	Sun Irrigation Systems Pvt. Ltd., Hatkanangale, Dist. Kolhapur
158	Arvind Cotsyn (India) Ltd, Hatkanangale, Dist. Kolhapur
159	Siddha Engineering, Hatkanangale, Dist. Kolhapur
160	Ameya Casting Private Limited, Hatkanangale, Dist. Kolhapur
161	Baldev Textile Mills Pvt. Ltd., Hatkanangale, Dist. Kolhapur
162	Arvind Dyeing & Bleaching Mills Pvt. Ltd., Hatkanangale, Dist. Kolhapur
163	Cygent International Pvt. Ltd., Hatkanangale, Dist. Kolhapur
164	Ved Industries, Hatkanangale, Dist. Kolhapur
165	Padmavati Industries, Hatkanangale, Dist. Kolhapur
166	Pragati Foudees Pvt. Ltd., Hatkanangale, Dist. Kolhapur
167	Sanmati CNC Engg. Works, Hatkanangale, Dist. Kolhapur
168	Dnyanaplast Pvt. Ltd., Hatkanangale, Dist. Kolhapur
169	Shri Srikrishna Gadgil, Mahratta Chamber of Commerce, Industries & Agriculture, Pune
170	Precise Systems, Satara
171	Quality Poultry Products Pvt. Ltd., Miraj
172	Khutale Engineering Pvt. Ltd., Satara
173	Synergy Engineers & Powder Coaters, Satara
174	Status Medical Equipments, Satara
175	Kavade Engineering Works, Satara
176	Gajanan Packwell Pvt. Ltd., Satara

<b>Sr. No.</b>	<b>Name of the Objector</b>
177	Maharashtra Rubber, Satara
178	Hindustan Feeds Manufacturing Company, Satara
179	S.P. Packaging, Satara
180	Shankul Engineering Pvt.Ltd., Satara
181	Speciality Urethanes Pvt. Ltd., Satara
182	A.N. Industries, Satara
183	Microcraft Enterprises, Satara
184	Pankaj Engineering, Satara
185	Utkur I & S Industries, Satara
186	Mutha Founders Pvt.Ltd, Kodoli, Satara
187	Kolhapur Mahanagarpalika, Kolhapur.
188	Shri Mohan Tikaram Borole, Vidyut Urja Equipments Pvt Ltd., Pune
189	Maitreya Polymers, Pune
190	Magna Industries Plant-II, Hatkanangale, Dist. Kolhapur
191	Hi-Tech Balancing & Engineering Industries, Hatkanangale, Dist. Kolhapur
192	Sumit Shyamsundar Modi, Ichalkaranji
193	Technocraft Engineering, Hatkanangale, Dist. Kolhapur
194	Om Founders, Hatkanangale, Dist. Kolhapur
195	Shri Laxmi Industrial Manufacture Association, Hatkanangale, Dist. Kolhapur
196	Supreme Plastics, Satara
197	Ebenezer Industries, Satara
198	Moraya Engineering, Satara
199	Maharashtra Scooters Ltd, Satara
200	DEK Engineering & Services, Satara
201	Dresswell Graments, Satara
202	Shree Engineering Works, Satara
203	Vardhini Udyog, Satara
204	Ankur Traders, Satara
205	Cooper Corporation Pvt.Ltd., Kodoli, Satara
206	Meditab Specialities Pvt. Ltd., Satara
207	Yogendra Traders, Satara
208	Beacon Industries, Satara
209	Poly Pet, Satara
210	Prajakta Engineering, Satara
211	Mutha Founders Pvt Ltd., Kodoli, Satara
212	Ajinkya Plastics Pvt.Ltd., Kodoli, Satara
213	Kotibhaskar Material Handling Equipments, Satara
214	Manshu Comtel Pvt. Ltd., Satara
215	J.K.Industries, Satara
216	Amar Precision Wire Products Pvt Ltd., Satara
217	Raja Enterprises, Satara
218	Peacock Allied Products Pvt.Ltd., Satara
219	Gear Torque Transmission, Satara
220	Avinash Carrier Pvt Ltd., Satara
221	Wel Flow Engineering Co., Satara
222	Top Gear Transmission, Satara

<b>Sr. No.</b>	<b>Name of the Objector</b>
223	Jay Bajrang Services, Satara
224	Shri Arunkumar M. Lalvani, Tilavani
225	Ratnaraj Core Shop, Hatkanangale, Dist. Kolhapur
226	Fie Spherotech, Hatkanangale, Dist. Kolhapur
227	The Sky Industries, Tilawani
228	Unirose Textile Processors Pvt. Ltd., Hatkanangale, Dist. Kolhapur
229	A G Turnmach Pvt. Ltd., Hatkanangale, Dist. Kolhapur
230	Sou. Basanti Satish Rathi, Hatkanangale, Dist. Kolhapur
231	Uniblue Textile Processors Pvt. Ltd., Hatkanangale, Dist. Kolhapur
232	R N Kulkarni & Sons Textiles Pvt. Ltd., Hatkanangale, Dist. Kolhapur
233	Vasudev P. Bamgad, Hatkanangale, Dist. Kolhapur
234	Samarth Metallurgicals (PL.II), Hatkanangale, Dist. Kolhapur
235	Solapur Zilla Yantramag Dharak Sangh, Solapur
236	Auto Machine Centre, Hatkanangale, Dist. Kolhapur
237	Auto Tech Engineers, Hatkanangale, Dist. Kolhapur
238	Auto Tech Engineers, Hatkanangale, Dist. Kolhapur
239	Auto Founders, Hatkanangale, Dist. Kolhapur
240	Pioneer Engineers, Hatkanangale, Dist. Kolhapur
241	Shri Bhimsen Gadkar, Akhil Bharatiya Grahak Panchayat, Nigadi, Pune
242	Veej Grahak Sangh, Pune
243	Sarhi NGO, Pune
244	GreenEarth Social Development Consulating Pvt. Ltd, Pune
245	Nangaon Sahkari Pani Purvtha M. Ltd, Nangaon
246	Shankar Brahme Samajvinan Grathalaya, Pune
247	Lokayat Yuvak Sanghtana, Pune
248	Lokmanya Jeshtya Nagrik Sangh And Lokmanya Hasyayog Sangh Parivar, Pune
249	Nagari Right Sanstha, Pune
250	Shri Anil Baburao Rane, Pune
251	Shri Vivek Velankar, Pune
252	Shri Ramesh Sardesai, Akhil Bhartiya Grahak, Panchayat, Pune

### Navi Mumbai Division

<b>Sr. No.</b>	<b>Name of the Objector</b>
[A]	Consumer Representative u/s. 94 (3) of the Electricity Act, 2003
1	Dr. Ashok Pendse, Thane Belapur Industries Association
2	Dr. S.L. Patil, Thane Belapur Industries Association
[B]	Representative of Public
3	Shri Ravindra Chavan, Member of Legislative Assembly
[C]	Objections / Suggestions by Consumers
4	Shri Prasad G. Karve, Mauje Dapoli
5	Shri N. Ponarathanam, Vel Electronics, Vel Induction Hardenings, Deonar, Mumbai
6	Shri Vasant L. Shah, Mulund (W), Mumbai
7	Shri Ashok Swami, Maharashtra State Co. op. Textile Federation Ltd., Mumbai
8	Shri Pratap Hogade, Janata Dal (Secular) Maharashtra,
9	Shri John Pareira, Janata Dal (Secular) Vasai Taluka

<b>Sr. No.</b>	<b>Name of the Objector</b>
10	Veej Grahak Sanghtana, Taluka Vasai
11	Nirbhay Jan Manch/Nirbhay Andolan, Tal. Vasai, Dist. Thane
12	NRB Bearings Limited, Thane
13	Shri Dilip Salvekar, Chamber of Small Industry Associations, Thane
14	Smt. Rashi Gupta, Thane Small Scale Industries Association, Thane
15	All India Association of Industries, Mumbai
16	Maharashtra Rajya Irrigation Federation, Kolhapur
17	Shri Prabhakar Limaye, Thane Manufacturers' Association, Thane
18	Shri Purushottam Kharade, Urja Prabodhan Kendra, Mumbai
19	Dr. Sohani, Association of Trust Hospitals (Thane), Thane
20	Kaushalya Medical Foundation Trust Hospital, Thane
21	Cardinal Gracias Memorial Hospital, Vasai
22	Shri Iqbal Najam, Mumbai
23	Hotel Leela Venture Ltd., Sahar, Mumbai
24	Shri Rajarshi Basu Ray, Thane
25	Shri Naresh Deshmukh, Mumbai
26	MGM Hospital & Research Centre, CBD, Belapur
27	Adv. S.R. Nargolkar, Mahamumbai Shikshan Sanstha Sanghtana, Vikroli (E)
28	Shri Kunal Pathare, Premium Hatcheries & Farma P. Ltd., At Kolghar, Post Poynad, Tal. Alibaug, Dist. Raigad
29	Ku-Koo-Ch-Ku Poultry Farm, At Chorandhe, Post Mapgaon, Tal. Alibaug, Dist. Raigad
30	Shree Halari Powerloom Owner's & Weaver's Association, Bhiwandi
31	Shri D. K. Sharma, Central Railway, Mumbai CST
32	Maharashtra State Powerloom Federation, Bhiwandi
33	Shri Memon, Rashtriya Ekta Sanghtana, Bhiwandi
34	Shri Shakil Ansari, Maharashtra Electricity Consumers Association, Bhiwandi
35	India Private Ports & Terminals Association, Mumbai
36	Nhava Sheva International Container Terminal Pvt. Ltd., Mumbai
37	Gateway Terminal of India Pvt. Ltd., GTI House, JNPT, Sheva, Navi Mumbai
38	Samajshuddhi Abhiyan, Vasai
39	Shri Manoj K. Hariya, Bhiwandi
40	Steel Authority of India Limited, Mumbai
41	The Association of Hospitals, Mumbai
42	Shri Ravi Khilnani, Ulhasnagar
43	Shri Alias B. Lopez, Aagashe, Vasai
44	Shantinagar Powerloom Weaver's Welfare Association, Bhiwandi
45	Shri Prescon P. Rodrigues, Aagashe, Vasai
46	Shri Radhesham, Ripening & Cold Chain People, Navi Mumbai
47	Common Effluent Treatment Plant (Thane – Belapur) Association, Navi Mumbai
48	Bethany Trust - Bethany Hospital, Thane
49	Shri A.R. Bapat, Thane (W)
50	Krystal Colloids Pvt. Ltd. Rabale, TTC MIDC
51	Envirocare Labs Pvt. Ltd., Thane
52	The Paper Products Ltd., Thane
53	Manometer (India) Pvt. Ltd., Thane
54	Aplab Limited, Thane

<b>Sr. No.</b>	<b>Name of the Objector</b>
55	Navi Mumbai Cold Storage Owners Welfare Association, Vashi, Navi Mumbai
56	Bhiwandi Powerloom Majoori Beam Weavers' & Owners' Association, Bhiwandi
57	Shri Suresh Madhiwala, Bombay Small Entrepreneurs Association, Mulund (W), Mumbai
58	Sir Mohamed Yusuf Seamen Welfare Foundation, Nhava Campus, Panvel Taluka
59	Miss. Ivona S. Dias, Mumbai
60	Shri Rakshapal Abrol, Bhartiya Udhami Avam Upbhokta Sangh, Mumbai
61	Alibaug Bhat Girani Chalak Wa Malak Kalyankari Sangh, Warsoli, Alibaug
62	PashchimMaharashtra Yantramag Sahakari Sanstha Mahasangh Maryadit, Ichalkaranji
63	Maharashtra Knitting Loom Sahakari Sanstha Association (Maryadit), Khotwadi, Tal. Hatkangale, Dist. Kolhapur
64	Om Fruit Company, Sakinaka, Anadheri (E)
65	Shri Dharmaraj D. Deshpande, Kolki, Tal. Phaltan, Dist. Satara
66	Shri Krishna Bhoir, MSEB Workers Federation
67	Shri Deven Tiwari, Omlaxmi Fruit Company
68	Shri Vitthal Ramdas Shah
69	Adv. N Thapan
70	Shri Ravi Anand