

**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**

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

**Tel. No. 022 22163964/65/69 – Fax 022 22163976**

**E-mail: [mercindia@mercindia.org.in](mailto:mercindia@mercindia.org.in)**

**Website: [www.mercindia.org.in](http://www.mercindia.org.in)**

**Case No. 72 of 2010**

**IN THE MATTER OF**

**Reliance Infrastructure Ltd. Distribution Business' (RInfra-D) Petition for Truing Up for  
FY 2008-09, Annual Performance Review for FY 2009-10 and Tariff Determination for FY  
2010-11**

**Shri V. P. Raja, Chairman**

**Shri Vijay L. Sonavane, Member**

**ORDER**

**Dated: July 29, 2011**

In accordance with Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005 notified by the Maharashtra Electricity Regulatory Commission (hereinafter referred as MERC or the Commission), Reliance Infrastructure Limited's Distribution Business (RInfra-D), submitted its application on affidavit for approval of truing up of Aggregate Revenue Requirement (ARR) for FY 2008-09, Annual Performance Review (APR) for FY 2009-10 and determination of ARR and Tariff for FY 2010-11. The Commission, in exercise of the powers vested in it under Section 61 and Section 62 of the Electricity Act, 2003 (EA 2003) and all other powers enabling it in this behalf, and after taking into consideration the submissions made by RInfra-D, suggestions and objections of the public, responses of RInfra-D, issues raised during the Public Hearing, and all other relevant material, and after review of Annual Performance for FY 2009-10 determines the ARR and Tariff for RInfra-D for FY 2010-11 as under.

## Table of Contents

<b>1</b>	<b><i>BACKGROUND AND BRIEF HISTORY</i></b>	<b>9</b>
1.1	Background	9
1.2	MERC Tariff Regulations	9
1.3	MERC Order on ARR and Tariff Petition for FY 2005-06 and FY 2006-07	9
1.4	ATE Order	9
1.5	MERC Order on MYT Petition of REL-D for FY 2007-08 to FY 2009-10	10
1.6	MERC Order on APR Petition for REL-D for FY 2007-08 and Tariff Determination for FY 2008-09	11
1.7	ATE Order on APR of 2007-08 and tariff determination of 2008-09	11
1.8	Petition for Annual Performance Review for FY 2008-09 and Tariff Determination for FY 2009-10	12
1.9	Stay Order	13
1.10	Clarificatory Order	14
1.11	Appointment of Investigation Authority	14
1.12	Vacation of Stay	15
1.13	PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2009-10 AND TARIFF DETERMINATION FOR FY 2010-11	15
1.14	Admission of Petition and Public Process	17
1.15	Organisation of the Order	18
<b>2</b>	<b><i>OBJECTIONS RECEIVED, RINFRA-D's RESPONSE AND COMMISSION'S RULING</i></b>	<b>20</b>
2.1	Maintenance of Separate Books of Accounts	20
2.2	Sales Forecast	21
2.3	Power Purchase	22
2.4	Renewable Energy	23
2.5	OPERATION & MAINTENANCE (O&M) EXPENSES	25

2.6	<b>EMPLOYEE EXPENSES</b>	25
2.7	<b>ADMINISTRATION &amp; GENERAL EXPENSES</b>	26
2.8	<b>Income-Tax Computation</b>	27
2.9	<b>Capital Expenditure</b>	28
2.10	<b>Depreciation</b>	29
2.11	<b>Loan REPAYMENT SCHEDULE</b>	29
2.12	<b>Distribution loss and Transmission loss</b>	30
2.13	<b>Interest on Working Capital and Consumers' Security Deposit</b>	30
2.14	<b>Security Deposit Refunded</b>	31
2.15	<b>Income from Regulated Business / Other Business</b>	32
2.16	<b>Wheeling losses</b>	32
2.17	<b>wheeling Charges</b>	34
2.18	<b>Recovery of Regulatory Assets</b>	35
2.19	<b>Average Cost of Supply</b>	38
2.20	<b>Fuel Adjustment Charges (FAC)</b>	38
2.21	<b>Electricity Duty and Tax on Sale of Electricity</b>	39
2.22	<b>Consumer Categorisation</b>	39
2.23	<b>Cross-subsidy</b>	41
2.24	<b>Cross-Subsidy Surcharge</b>	43
2.25	<b>CAPITAL EXPENDITURE FOR CHANGE-OVER CONSUMERS</b>	52
2.26	<b>IMPACT OF ATE JUDGMENT</b>	53
2.27	<b>Supply Margin</b>	54
2.28	<b>Increase in Tariff</b>	55
2.29	<b>Carrying cost on Cumulative Revenue Gap</b>	57
2.30	<b>RE-BRANDING</b>	57
2.31	<b>Expiry of Distribution Licensee</b>	58
2.32	<b>Direction for compliance of Regulations</b>	58
2.33	<b>STATUS OF PROPOSED DE-MERGER SCHEME</b>	59
2.34	<b>Legal Entity</b>	60

2.35	Distribution LicenCe _____	60
2.36	Capex _____	61
2.37	Future Tariff _____	61
2.38	APPLICABLE TARIFF REGULATIONS _____	62
2.39	STATUS OF APPEALS _____	62
2.40	CHOICE OF NETWORK PROVIDER _____	63
<b>3</b>	<b><i>IMPACT OF JUDGEMENT OF APPELLATE TRIBUNAL FOR ELECTRICITY (ATE) AND PREVIOUS YEARS' TRUING UP</i></b> _____	<b>64</b>
3.1	Non-deduction of one month equivalent cost of power purchase in computation of Working Capital for distribution business _____	64
3.2	Interest on Working Capital met through Internal Accruals _____	66
3.3	Efficiency gains due to lower distribution losses for FY 2007 _____	70
3.4	Rate of Interest in respect of Deferred Recovery _____	75
3.5	Incremental Depreciation for assets commissioned during the year _____	77
3.6	IMPACT OF ADDITIONAL CAPITALISATION FOR FY 2007-08 _____	78
3.7	ISSUE OF FUNDING OF CAPITAL ASSETS THROUGH CONSUMER CONTRIBUTION _____	78
3.8	SUMMARY OF IMPACT FOR FY 2006-07 AND FY 2007-08 _____	80
<b>4</b>	<b><i>TRUING UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2008-09</i></b> _____	<b>81</b>
4.1	Sales _____	81
4.2	POWER PURCHASE QUANTUM AND COST FOR FY 2008-09 _____	81
4.3	TRANSMISSION LOSSES _____	88
4.4	DISTRIBUTION LOSSES AND ENERGY BALANCE _____	88
4.5	O&M EXPENSES _____	88
4.6	CAPITAL EXPENDITURE AND CAPITALISATION _____	91
4.7	DEPRECIATION AND ADVANCE AGAINST DEPRECIATION _____	95
4.8	LOAN REPAYMENT SCHEDULE _____	96
4.9	INTEREST EXPENSES _____	96
4.10	INTEREST ON WORKING CAPITAL AND CONSUMERS' SECURITY DEPOSIT _____	98

4.11	PROVISIONING FOR BAD DEBTS _____	99
4.12	CONTRIBUTION TO CONTINGENCY RESERVES _____	99
4.13	INCOME TAX _____	100
4.14	RETURN ON EQUITY (ROE) _____	105
4.15	NON TARIFF INCOME _____	106
<i>1</i>	<i>106</i>	
4.16	Revenue from sale of electricity for FY 2008-09 _____	107
4.17	SHARING OF GAINS AND LOSSES IN FY 2008-09 _____	108
4.18	AGGREGATE REVENUE REQUIREMENT IN FY 2008-09 _____	112
4.19	REVENUE GAP _____	114
<i>5</i>	<i>PERFORMANCE REVIEW OF FY 2009-10 AND DETERMINATION OF AGGREGATE REVENUE REQUIREMENT FOR FY 2010-11 _____</i>	<i>115</i>
5.1	PERFORMANCE PARAMETERS _____	115
5.2	PROVISIONAL TRUING-UP FOR FY 2009-10 _____	119
5.3	SALES _____	120
5.4	DISTRIBUTION LOSSES AND ENERGY INPUT _____	123
5.5	ENERGY AVAILABILITY AND POWER PURCHASE COST DURING FY 2009-10 AND FY 2010-11 _____	123
5.6	O&M EXPENSES FOR FY 2009-10 AND FY 2010-11 _____	136
5.7	CAPITAL EXPENDITURE AND CAPITALISATION _____	143
5.8	DEPRECIATION AND ADVANCE AGAINST DEPRECIATION _____	147
5.9	INTEREST EXPENSES _____	150
5.10	INTEREST ON WORKING CAPITAL and Consumers' Security Deposit FOR FY 2009- 10 AND FY 2010-11 _____	154
5.11	CONTRIBUTION TO CONTINGENCY RESERVES FOR FY 2009-10 AND FY 2010-11 _____	155
5.12	PROVISIONING FOR BAD DEBTS _____	156
5.13	INCOME TAX FOR FY 2009-10 AND FY 2010-11 _____	157
5.14	NON-TARIFF INCOME FOR FY 2009-10 AND FY 2010-11 _____	158
5.15	Income from Other Business FOR FY 2010-11 _____	159

5.16	RETURN ON EQUITY (ROE) _____	160
5.17	REVENUE FROM SALE OF ELECTRICITY FOR FY 2009-10 AND FY 2010-11 FROM EXISTING TARIFFS _____	162
5.18	AGGREGATE REVENUE REQUIREMENT OF RINFRA-D FOR FY 2009-10 AND FY 2010-11 _____	166
<b>6</b>	<b><i>TARIFF PHILOSOPHY AND CATEGORY-WISE TARIFFS FOR FY 2010-11</i></b> _____	<b>170</b>
6.1	TREATMENT OF REVENUE GAP PROPOSED BY RINFRA-D FOR FY 2010-11 _____	170
6.2	Tariff Proposal Principles _____	171
6.3	RECOVERY OF REGULATORY ASSETS AND PAST REVENUE GAPS	173
6.4	Loss of Cross-subsidy _____	177

## Abbreviations

A&G	Administrative and General
ASCI	Administrative Staff College of India
ARR	Aggregate Revenue Requirement
APR	Annual Performance Review
ATE	Hon'ble Appellate Tribunal for Electricity
ACoS	Average Cost of Supply
BTS Tower	Base Station Antenna
BPL	Below Poverty Line
CERC	Central Electricity Regulatory Commission
CDM	Clean Development Mechanism
CAGR	Compounded Annual Growth Rate
CPI	Consumer Price Index
CSD	Consumers Security Deposit
COS	Cost of supply
CTC	Cost To Company
CSS	Cross Subsidy Surcharge
DTPS	Dahanu Thermal Power Station
DA	Dearness Allowance
DSM	Demand Side Management
DPR	Detailed Project Report
EA 2003	Electricity Act, 2003
FAC	Fuel Adjustment Charges
GoM	Government of Maharashtra
GFA	Gross Fixed Assets
HT	High Tension
HV	High Voltage
IT	Income Tax
AHAR	Indian Hotel and Restaurant Association
IDC	Interest During Construction
IoWC	Interest on Working Capital
IBSM	Interim Balancing and Settlement Mechanism
InSTS	Intra-State Transmission System
kV	Kilo Volt
kW	Kilo Watt
kVA	Kilo-Volt Amperes
LT	Low Tension
LV	Low Voltage

MERC/ Commission	Maharashtra Electricity Regulatory Commission
MEDA	Maharashtra Energy Development Agency
MSEDCL	Maharashtra State Electricity Distribution Company Ltd.
MSLDC	Maharashtra State Load Despatch Centre
MRP	Maximum Retail Price
MW	Mega Watt
MT	Metric Tonne
MU	Million Units
MYT	Multi Year Tariff
MIAL	Mumbai International Airport Pvt. Ltd.
MPMG	Mumbai Power Management Group
OA	Open Access
O&M	Operation and Maintenance
PLF	Plant Load Factor
PMG	Power Management Group
PLR	Prime Lending Rate
RI	Re-Instatement
RInfra	Reliance Infrastructure Limited
RCOM	Reliance Communications Ltd.
REL	Reliance Energy Limited, which name was subsequently changed by the Registrar of Companies to Reliance Infrastructure Limited
RInfra-G	Reliance Infrastructure Limited - Generation Business
RInfra-D	Reliance Infrastructure Limited's Distribution Business
RE	Renewable Energy
REC	Renewable Energy Certificates
RPS	Renewable Purchase Specification
R&M	Repair and Maintenance
ROE	Return on Equity
SBI	State Bank of India
STU	State Transmission Utility
ToD	Time of Day
TOSE	Tax on Sale of Electricity
TPC	The Tata Power Company Limited
TPC-G	The Tata Power Company-Generation Business
TPTCL	Tata Power Trading Company Ltd.
TSU	Transmission System Users
TTSC	Total Transmission System Charges
TVS	Technical Validation Session
WPI	Wholesale Price Index



# **1 BACKGROUND AND BRIEF HISTORY**

## **1.1 BACKGROUND**

A Petition has been filed by Reliance Infrastructure Limited (RInfra), earlier known as “Reliance Energy Limited (“REL”), for Truing up of FY 2008-09 Aggregate Revenue Requirement, Annual Performance Review for FY 2009-10 and determination of Aggregate Revenue Requirement and Tariff for FY 2010-11 for its Distribution Business. This Order disposes of the said petition.

## **1.2 MERC TARIFF REGULATIONS**

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

## **1.3 MERC ORDER ON ARR AND TARIFF PETITION FOR FY 2005-06 AND FY 2006-07**

Reliance Energy Limited (REL) submitted its ARR and Tariff Petition for FY 2006-07 on February 24, 2006. The Commission issued the Order on the ARR Petition of REL for FY 2005-06 and ARR and Tariff Petition of REL for FY 2006-07 on October 3, 2006.

## **1.4 ATE ORDER**

The Commission, in the Tariff Order dated October 3, 2006, determined the aggregate revenue requirement of Reliance Energy Limited (REL) for FY 2006-07. In the same Order, the Commission also dealt with the truing up of cost and revenues for FY 2004–05 and FY 2005–06 based on actuals, subject to prudence check.

REL preferred an appeal from this Order of the Commission before the Hon’ble Appellate Tribunal for Electricity (ATE) under Section 111 of the EA 2003 on the issues pertaining to the following items:

- a) Disallowance of actual Employee expenditure and A&G expenditure for FY 2004-05, FY 2005-06 and FY 2006-07,

- b) Disallowance of actual R&M expenditure for FY 2006-07,
- c) Disallowance of higher Income Tax for FY 2004-05 and FY 2005-06,
- d) Direction to reduce distribution loss level in FY 2006-07,
- e) Deviation in the operating norms of station heat rate, auxiliary consumption and secondary oil consumption for generation vis-à-vis the norms stipulated in the Tariff Regulations, and
- f) Reversal of treatment on rebate given by REL to its consumers on account of Judgment passed by the Hon'ble ATE dated May 22, 2006 by including it in the ARR of REL by the Commission in the manner set out in paragraph 7.16 and 7.17 of Tariff Order for FY 2006-07.

For the reasons given in the Judgment dated April 4, 2007 in Appeal No. 251 of 2006 the Hon'ble ATE upheld the appeals of REL as given below:

- a) The Hon'ble ATE upheld REL's appeal regarding the allowance of the actual employee expenditure, A&G expenditure and Income Tax of Rs. 207.34 Crore, Rs 102.02 Crore and Rs 101 Crore, respectively, as claimed by REL as against the Commission approved figures of Rs 161.85 Crore, Rs 74.05 Crore and Rs 7.64 Crore, respectively, for FY 2004-05. The total net additional expenditure allowed by ATE for REL as a whole for FY 2004-05, vis-à-vis the Commission's Tariff Order, works out to Rs. 167 Crore.
- b) The Hon'ble ATE upheld REL's appeal regarding the allowance of the actual employee expenditure, A&G expenditure and Income Tax of Rs. 207.26 Crore, Rs 101.64 Crore and Rs 74 Crore, respectively, as against the Commission approved figures of Rs 182.76 Cr, Rs 76.48 Cr and Rs 26.96 Cr, respectively, for FY 2005-06. The total net additional expenditure allowed by ATE for REL as a whole for FY 2005-06, vis-à-vis the Commission's Tariff Order, works out to Rs. 95.7 Crore.
- c) Hon'ble ATE upheld REL's appeal in the context of applicability of norms stipulated under the Tariff Regulations, and ruled that the Commission should not deviate from the operating norms for station heat rate, auxiliary consumption and specific consumption of secondary fuel as specified in the MERC (Terms and Conditions of Tariff) Regulations, 2005, even though REL's performance was better than the norms.

### **1.5 MERC ORDER ON MYT PETITION OF REL-D FOR FY 2007-08 TO FY 2009-10**

REL submitted its ARR and Multi Year Tariff (MYT) Petition for the first Control Period from FY 2007-08 to FY 2009-10 for its Distribution Business on January 31, 2007. The Commission

issued the MYT Order for REL-D for the first Control Period, i.e., FY 2007-08 to FY 2009-10, on April 24, 2007, which came into effect from April 24, 2007. As the Annual Performance Review for FY 2007-08 and Tariff determination for FY 2008-09 were under process, various distribution licensees filed their respective Petitions for continuation of revenue requirement determined for FY 2007-08 till the time of issuance of the respective Orders for each distribution licensee. Accordingly, the Commission in its Order issued on April 1, 2008 in Case No. 102 of 2007 extended the applicability of the aforesaid Tariff Orders for the distribution licensees till the revised tariffs are determined for FY 2008-09 under the APR framework and Orders are issued there under.

#### **1.6 MERC ORDER ON APR PETITION FOR REL-D FOR FY 2007-08 AND TARIFF DETERMINATION FOR FY 2008-09**

REL-D submitted its Petition for APR for FY 2007-08 and Tariff Determination for FY 2008-09 for its Distribution Business on November 30, 2007 numbered as Case No. 66 of 2007. The Commission issued the APR Order for REL on June 4, 2008, which came into effect from June 1, 2008, and the tariffs were initially valid up to March 31, 2009, which was later extended till the revised revenue requirement is determined for FY 2009-10, vide the Commission's Order dated April 15, 2009 in Case No. 152, 153 and 154 of 2008. REL-D preferred an appeal before the Hon'ble ATE numbered as Appeal No. 117 of 2008, against the Commission's Order on the APR for FY 2007-08 and determination of tariff for FY 2008-09 on the issue of sharing of efficiency gains and losses, income tax computation and computation of transmission system availability. A Judgment came to be delivered by the Hon'ble ATE in TPC's Appeal Nos. 137, 138 and 139 of 2008 on issues of incremental depreciation on assets added during the year. RInfra-D added that in this petition it has assessed the impact of the said Judgments on the truing-up of FY 2006-07 and accordingly for FY 2007-08 separately.

#### **1.7 ATE ORDER ON APR OF 2007-08 AND TARIFF DETERMINATION OF 2008-09**

In Appeal No. 117 of 2008, the appellant, RInfra-D preferred an appeal from certain portions of the order dated June 4, 2008 passed by MERC in Case No. 66 of 2007 in the matter of RInfra's distribution business petition for APR for FY 2007-08 and tariff determination for FY 2008-09. RInfra-D preferred an appeal from this Order of the Commission before the Hon'ble ATE on issues pertaining to the following items:

- Interest in respect of Working Capital met through internal accruals ought not to be treated as efficiency gains

- Non-deduction of one month equivalent cost of power purchase in computation of Working Capital for distribution business
- Efficiency gains due to lower distribution losses for FY 2007
- Approval of additional R&M Expense for FY 2008-09
- Rate of Interest in respect of Deferred Recovery (Regulatory Assets)

The appeals of RInfra came to be allowed in terms of the Hon'ble ATE's Judgment dated August 28, 2009 in Appeal No. 117 of 2008 as follows:

- Hon'ble ATE held that the entire interest on normative interest rate basis is payable to RInfra-D.
- Hon'ble ATE allowed the appeal in respect of non-deduction of one month equivalent cost of power purchase in computation of Working Capital for distribution business.
- Hon'ble ATE directed the Commission to re-compute the efficiency gains considering the reduction in distribution loss level from 12.10% to 11.25%.
- Hon'ble ATE directed the Commission to allow the additional R&M expenditure on re-instatement of asphalt roads, service tax paid thereon, arrears of labour contract payments and Siera Cards payments.
- Hon'ble ATE allowed RInfra-D's appeal to allow Short Term Prime Lending Rate of SBI for deferred payments and directed the Commission to incorporate the same while carrying out the trueing up exercise for the year 2008-09.

## **1.8 PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2008-09 AND TARIFF DETERMINATION FOR FY 2009-10**

RInfra-D submitted its Petition for APR for FY 2008-09 and Tariff Determination for FY 2009-10 for its Distribution Business on December 15, 2008, numbered as Case No. 121 of 2008. The Commission issued the APR Order for RInfra-D on June 15, 2009, which came into effect from June 1, 2009.

RInfra-D preferred an appeal, numbered as Appeal No. 150 of 2009 against the APR Order dated June 15, 2009 before the Hon'ble ATE on certain issues. RInfra has submitted that it has not considered any additional impact in the present Petition on account of the issues raised in the said Appeal No. 150 of 2009 as the Hon'ble ATE has yet to deliver the Judgment in the said Appeal No. 150 of 2009.

## 1.9 STAY ORDER

The Government of Maharashtra (GoM), issued directions in terms of a letter ref: REL2009/CR 227/NRG-1, dated June 25, 2009 to the Commission inter-alia, stating as under:

*“Whereas and in the circumstances referred to above, Government of Maharashtra is of the opinion that Government should seek advise from the Maharashtra Electricity Regulatory Commission and in order to protect the interest of common consumer from getting unreasonably burdened & therefore, under the powers delegated under section 108 read with section 86(2), Government hereby directs Maharashtra Electricity Regulatory Commission to investigate as to whether M/s Reliance Infrastructure Ltd. has discharged its duties as envisaged in the Act in the most economical manner so as to not to result in unnecessary avoidable burden on the consumers of that area and take further action as may be considered necessary. The said investigation shall be carried out considering the above points and any other relevant point in that context.*

...

*The Government of Maharashtra also directs Maharashtra Electricity Regulatory Commission to take emergent steps as it may deem fit, relating to policy of Government of Maharashtra of protecting consumers interest in a monopoly situation, as may be necessary to ensure that no unreasonable and unjustified bills are collected in the intervening period in which this investigation is in progress.” (Emphasis added)*

In light of the GoM’s directions that *“no unreasonable and unjustified bills are collected in the intervening period in which this investigation is in progress”* and and the direction to the Commission to undertake a detailed investigation on metering, power purchase expenses and transactions undertaken by RInfra-D, as well as capital expenditure schemes, and also considering the special exigent circumstances, the Commission vide its Order dated July 15, 2009 ordered a partial stay on the tariff rates of RInfra-D as approved by the Commission vide its Tariff Order dated June 15, 2009. The tariff increase for the following consumer categories and sub-categories was stayed till further orders considering the special exigent circumstances:-

- LT I Residential
- LT II Commercial (A) and (B)
- LT III Industry below 20 kW
- LT V Advertisement & Hoardings
- LT VII Temporary Others
- HT I Industry

The Commission clarified in its Order dated July 15, 2009 that the tariff of only such categories and sub-categories, where the tariffs have been increased vis-à-vis the tariff prevalent in the previous year (after including FAC and Additional FAC), had been stayed till further Orders in this regard. For these categories, the tariff as determined in the previous Tariff Order, i.e., Order dated June 4, 2008 in Case No. 66 of 2007 was made applicable. The tariff for the other consumer categories and sub-categories, where the tariffs had been reduced vis-à-vis the tariff prevalent in the previous year (after including FAC and Additional FAC), was directed to continue to be charged as determined in the Order dated June 15, 2009 in Case No. 121 of 2008.

### **1.10 CLARIFICATORY ORDER**

The Commission issued a Clarificatory Order dated July 22, 2009, in Case No. 121 of 2008, in order to operationalise the choice to consumers of REL/RIntra and TPC-D (“parallel licensees”) to choose their distribution licensee/ supplier and to enable the consumers and distribution licensees to understand the implications arising from operationalizing of the parallel licensee system. In this Clarificatory Order, the Wheeling Charges were expressed in terms of Rs/kWh, as against Rs/kW/month in the Order dated June 15, 2009, in Case No. 121 of 2008. It was further clarified that no substantive change were being made to the wheeling charges and the wheeling charges were not freshly determined.

### **1.11 APPOINTMENT OF INVESTIGATION AUTHORITY**

In terms of GoM’s above-said letter dated June 25, 2009 issuing directions to the Commission under Section 108 of the EA 2003, the Commission vide its Order dated September 08, 2009 appointed Administrative Staff College of India (ASCI) to act as an “Investigating Authority” to investigate the affairs of RIntra-D as to whether it has discharged its duties as envisaged in EA 2003 in the most economical and efficient manner, and on the following:-

- i. To scrutinise Tariff Petitions, Record of Proceedings / Minutes of meetings and data submitted to the Commission by RIntra-Distribution Business (including Petitions and data submitted by the erstwhile BSES Ltd and Reliance Energy Limited) during the period from 1st April 2003 to 31st March 2009 so as to relate the same to the actual results of the investigation, and to report to the Commission regarding discrepancy found, if any.
- ii. To verify the physical vouchers for each transaction/actual expenses recorded in the books of accounts related to the investigation areas referred to above for the aforesaid

- period (i.e., Period from 1st April 2003 to 31st March 2009), so as to examine the correctness and appropriateness of the transactions reflected in the books of accounts.
- iii. To examine the procedure adopted for procurement of power and its related transactions reflected in the books of accounts maintained by RInfra-D to ensure the optimal impact on cost of supply and tariff being charged by RInfra-D to its retail consumers.
  - iv. To examine/undertake scrutiny of actual scope, objective and procedures adopted for procurement of equipments for capital investment schemes undertaken by RInfra-D and evaluation of benefits stated at the time of in-principle approval vis-à-vis the actual benefits accrued in the operations of RInfra-D.
  - v. To undertake detailed item-by-item examination of the various expense and revenue heads, to examine that expenses of other businesses are not being passed on to the consumers under regulated business, and also that the complete and due income of the regulated business is being retained under the regulated business, examine as to whether the assets being reported under regulated business are actually physically existing and are being used for the benefit of the regulated business.
  - vi. To examine the basic accounting records including basic vouchers.

## **1.12 VACATION OF STAY**

The Commission received the investigation report from ASCI vide its letter dated July 09, 2010. After considering the contents of the said investigation report and representation received from RInfra, the Commission vide its Order dated September 9, 2010 passed an Order vacating the partial stay of the Order dated June 15, 2009 in Case No. 121 of 2008. As a result of the vacation of the stay, the revised tariffs approved by the Commission in the Order dated June 15, 2009, become effective and applicable from that day onwards.

## **1.13 PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2009-10 AND TARIFF DETERMINATION FOR FY 2010-11**

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

Due to the pendency of the investigation by ASCI and Stay on Order dated June 15, 2009 in Case No. 121 of 2008, RInfra-D requested the Commission to permit RInfra-D to submit the APR Petition for FY 2009-10 and ARR and Tariff Petition for FY 2010-11 after the ASCI investigation Report was submitted and accepted by the Commission. RInfra-D submitted its Petition for truing up for FY 2008-09, APR for FY 2009-10 and tariff determination for FY 2010-11 on October 11, 2010, post vacation of stay by the Commission. RInfra submitted that the process is delayed to the extent that FY 2009-10 is over and actual data is available, hence, there is no point in carrying out provisional truing-up for FY 2009-10. RInfra-D submitted that it has submitted all actual data for FY 2009-10 in the Petition. RInfra-D further submitted that due to certain pending operational issues, the statutory audit of FY 2009-10 numbers is not over yet, however, the financials will not undergo any change at the time of statutory audit.

RInfra-D submitted the Petition based on actual audited expenditure for FY 2008-09, actual expenditure for FY 2009-10, and actual data for first half of FY 2010-11 and estimates for the second half of FY 2010-11. RInfra-D, in its Petition, requested the Commission to:

- Approve past period expenses pertaining to FY 2006-07 and FY 2007-08 which had arisen on account of Hon'ble ATE Judgment dated August 28, 2009 in Appeal No. 117 of 2008 and other reasons explained in the Petition
- Approve the ARR for FY 2008-09 for truing up purpose
- Approve the APR for FY 2009-10
- Approve the ARR and Tariff proposal for FY 2010-11
- Approve a mechanism for recovery of loss of cross-subsidy due to migration of consumers.

The Commission, vide its letter dated November 03, 2010, forwarded the preliminary data gaps and information required from RInfra-D. RInfra submitted its replies to preliminary data gaps and information requirement on November 12, 2010 and November 16, 2010.

The Commission held a Technical Validation Session (TVS) on RInfra's APR for FY 2009-10 and Tariff Petition for FY 2010-11 on November 16, 2010, in the presence of authorised Consumer Representatives to represent the interest of consumers in the proceedings before the Commission. The Commission forwarded additional data gaps on December 03, 2010. The Revised Petition was submitted by RInfra-D vide its letter dated December 9, 2010, and reply to the data gaps raised were submitted vide letters dated January 14, 2011 and January 15, 2011, before Second Technical Validation Session (TVS) held on January 17, 2011. The list of individuals, who participated in first and second TVS, is provided at **Appendix-1**. During the



TVS, the Commission directed RInfra-D to provide additional information and clarifications on issues raised during the TVS. On February 03, 2011, a meeting was held to discuss the issues relating to Power Purchase Expenses of RInfra-D.

The Commission also directed RInfra-D to submit the draft Public Notice in the format prescribed by the Commission.

#### **1.14 ADMISSION OF PETITION AND PUBLIC PROCESS**

RInfra-D submitted its responses on February 14, 2011 to the queries raised during the Second TVS and the meeting held post TVS, and the Commission admitted the APR Petition of RInfra-D on February 28, 2011.

In accordance with Section 64 of the EA 2003, the Commission directed RInfra-D to publish its application in the prescribed abridged form and manner, to ensure public participation. The Commission also directed RInfra-D to reply expeditiously to all the suggestions and comments from stakeholders on its Petition. RInfra-D issued the public notices in newspapers inviting comments/suggestions from stakeholders on its APR Petition. The Public Notice was published in The Times of India (English), Indian Express (English), Loksatta (Marathi) and Samana (Marathi), newspapers on March 5, 2011. The copies of RInfra-D's Petitions and its summary were made available for inspection/purchase to members of the public at RInfra's offices and on RInfra's website ([www.rinfra.com](http://www.rinfra.com)). The copy of Public Notice and Executive Summary of the Petition was also available on the website of the Commission ([www.mercindia.org.in](http://www.mercindia.org.in)) in downloadable format. The Public Notice specified that the suggestions/objections, either in English or Marathi, may be filed in the form of affidavits along with proof of service on RInfra-D.

The Commission received written objections expressing concerns primarily on several issues, including distribution losses, sales projections, high power purchase expenses, proposed recovery of cross-subsidy surcharge and recovery of regulatory assets from migrating consumers, etc., in case of RInfra-D.

RInfra-D had filed Appeal No. 200 of 2010 on October 25, 2010 before the Hon'ble ATE in the matter inter alia seeking directions upon the Commission to consider two issues relating to cross-subsidy surcharge and regulatory assets from change over consumers in the tariff proceedings. An Order dated March 1, 2011 has been passed by the Hon'ble Tribunal directing the Commission to consider these issues in the tariff proceedings after hearing all the parties

concerned within 120 days either from the date of admission or from the date of the Order, whichever is earlier.

Subsequently, MERC published a Reminder Public Notice dated March 30, 2011, incorporating the directives of the ATE in the Judgment dated March 1, 2011 (Appeal No. 200 of 2010) to consider two issues relating to cross-subsidy surcharge and regulatory assets from change over consumers in the tariff proceedings after hearing all the parties concerned.

The Public Hearing was held on April 02, 2011 at 10.30 hours at Rangsharda Natya Mandir, Bandra Reclamation, Bandra (W), Mumbai 400 050.

The list of objectors, who participated in the Public Hearing, is provided in **Appendix- 2**.

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

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

### **1.15 ORGANISATION OF THE ORDER**

This Order is organised in the following five Sections:

- **Section 1** of the Order provides a brief history of the regulatory process undertaken by the Commission. For the sake of convenience, a list of **Abbreviations** with their expanded forms has been included.
- **Section 2** of the Order lists out the various objections raised by the objectors in writing as well as during the Public Hearing before the Commission. The various objections have been summarized, followed by the response of RInfra and the ruling of the Commission on each of the issues.
- **Section 3** of the Order comprises of the impact of Judgment of ATE and previous years truing up.

- **Section 4** of the Order details the truing up of expenses and revenue of RInfra's Distribution Business for FY 2008-09, including sharing of efficiency gains/losses due to controllable factors.
- **Section 5** of the Order comprises the Review of Performance for FY 2009-10, covering both physical performance and expenditure heads. This Section also comprises the Commission's analysis on various components of aggregate revenue requirement of RInfra-D for FY 2010-11.
- **Section 6** of the Order comprises the Tariff Philosophy proposed by RInfra-D and the Commission's views on the same.

## **2 OBJECTIONS RECEIVED, RINFRA-D's RESPONSE AND COMMISSION'S RULING**

### **2.1 MAINTENANCE OF SEPARATE BOOKS OF ACCOUNTS**

Shri Vinayak Joshi and Shri K. R. Nevrekar submitted that as per the Reconciliation Statement submitted by RInfra-D, the corporate allocable expenditure has been allocated in the proportion of turnover of Mumbai Licensee Business. However, the ASCI Report has stated that it was difficult to verify the procedure for allocation, which is based on revenue earned by each business. The objectors enquired regarding the steps taken to verify the correctness of allocation of corporate expenses as shown in the Reconciliation Statement submitted by RInfra-D.

Shri Vinayak Joshi, Shri K. R. Nevrekar and others submitted that MERC (Uniform Recording, Maintenance and Reporting of Information) Regulations, 2009, provides that information should be submitted in prescribed formats on quarterly basis and at least the yearly formats should have been included in the Petition. The objectors enquired whether RInfra-D is complying with the Regulations and submitting the formats on quarterly basis.

#### ***RInfra-D's Response***

RInfra-D submitted that it has not made any change in the methodology employed for allocation of corporate allocable expenses. The standard procedure of allocation of these common expenses to Mumbai distribution business based on turnover, has been applied for FY 2008-09 and FY 2009-10, as has been done in the past. ASCI itself has observed in its finding that "proper allocation is made for FY 2007-08 and FY 2008-09 for which details are made available."

RInfra-D submitted that it has complied with the requirements of the above mentioned Regulations and has submitted its Quarterly Returns to the Commission for all the four quarters of FY 2009-10 and the first three quarters of FY 2010-11.

#### **Commission's Ruling**

The Commission has obtained the Reconciliation Statement towards reconciliation of expenses and revenue submitted in the APR Petition with the expenses and revenue allocated to its various businesses as per the Audited Accounts, and the Reconciliation Statement has been made part of the Petition that was published for inviting comments from the stakeholders. Further, the Audited Accounts of the Petitioner as well as the Allocation Statements for allocating the expenses and revenue to its various businesses are submitted by the Petitioner on affidavit and are duly

certified by the Auditor. Hence, the Commission has relied on the Reconciliation Statement duly certified by the Auditor, for the purpose of determining the ARR.

The Commission has notified the MERC (Uniform Recording, Maintenance and Reporting of Information) Regulations, 2009 on April 20, 2009 which is designed to show more clear segment-wise information for each of the Businesses regulated by the Commission. RInfra-D has been submitting the required formats, however, it has been observed that the formats relating to Return on Equity and Cash Flow of the licensed distribution business are not being submitted by RInfra-D. RInfra-D is directed to submit all the Formats specified under the above-referred Regulations, and ensure completeness of the submissions, in accordance with the Regulations.

## **2.2 SALES FORECAST**

Shri Sandeep Ohri, representing BIJLEE-Yahoogroup, submitted that RInfra-D has considered different growth rates for different categories to arrive at FY 2010-11 Base Case sales. He added that mere statements by RInfra-D that certain categories are showing a certain trend is not sufficient; these have to be substantiated with relevant data and proven. For instance, for LT Residential category it is stated that “The growth rate in LT Residential has shown a reasonable consistency over past five years and hence, a five year CAGR has been considered for forecasting sales.” It seems a particular percentage seems to have been omitted in this sentence. He added that RInfra-D has to provide the past six years’ data of this category and show that there is a consistent trend in CAGR. Similarly, for the LT Commercial category it is stated that “The growth rate in LT Commercial has shown a rapid decline in last few years. A 2-year CAGR is assumed to be a fair representative of growth.” Again, a particular percentage seems to be missing in this sentence. Shri Sandeep Ohri asked RInfra-D to provide details of the past six years and justify the reasons for considering only a 2-year CAGR. Shri Sandeep Ohri further stated that it is understood that certain categories have been recast in different years and the Petitioner may provide reasoning for the groupings.

### ***RInfra-D’s Response***

RInfra-D submitted the category-wise sales and the basis of RInfra-D’s sales projections. RInfra-D further submitted the data on category-wise revenue and number of consumers for the last five years starting from FY 2005-06 to FY 2009-10.

### **Commission’s Ruling**

For FY 2010-11, the Commission obtained the details of actual category-wise sales for the ten-month period from April 2010 to January 2011 for RInfra-D consumers. The Commission has

pro-rated this actual category-wise sales for the entire FY 2010-11, by considering the share of sales in February and March of the previous year, for each consumer category separately. The details of category-wise sales considered by the Commission for FY 2010-11 have been elaborated in Section 5.3 of this Order.

### **2.3 POWER PURCHASE**

Shri Vinayak Joshi, Shri K. R. Nevrekar and others submitted that RInfracorps has to purchase more than 30% of its power requirement from bilateral sources and Imbalance Pool. Due to RInfracorps's failure to enter into long-term power purchase agreements, RInfracorps has had to purchase power at a very high cost from bilateral and imbalance pool for FY 2008-09 at the rate of Rs. 8.82 per unit, which is the double the rate for power purchased from TPC and 3.5 times the rate for power purchased from RInfracorps-G's Dahanu plant. Similarly, for FY 2009-10 also, the power purchase cost has increased due to RInfracorps's failure to enter into long-term PPA. The objectors requested the Commission to allow the power purchase expenses to RInfracorps-D only at the level of TPC, with the balance cost being absorbed by RInfracorps-D for FY 2009-10 and FY 2010-11. They added that while determining the ARR for FY 2010-11, the Commission should apply the power purchase rate of power supplied by TPC for bilateral and imbalance pool also. The cost will work out to Rs. 2932 Crore, which is Rs 667 Crore lower than that projected by RInfracorps-D.

Shri Rakshpal Abrol and Shri Sandeep Ohri submitted that RInfracorps-D has not once mentioned its own lapse in entering into a long-term Power Purchase Agreement, requiring it to procure costly power from the spot market. RInfracorps-D has made it out to be the doing of TPC-G, whereas the EA 2003 clearly puts the responsibility on the Distribution Licensee to secure cheap power to protect the interest of its consumers.

Shri Rakshpal Abrol and Shri N. Ponrathnam submitted that as RInfracorps-D has failed miserably in submitting any long-term PPA before the Commission for the stability of power purchase price as per Regulation 76.5 of Part H of MERC (Terms and Conditions of Tariff) Regulations, 2005, the costly power purchases shown by RInfracorps-D should be disallowed. They submitted that the Commission may reject this Petition on the grounds of inability to show that the consumer will get uninterrupted power at reasonable cost.

During the public hearing on the APR Petition filed by RInfracorps-D, many objectors voiced their concern over the increase in power purchase cost due to costly power purchase from external sources.

### ***RInfra-D's Response***

RInfra-D submitted that the power purchase forecasts of both FY 2008-09 and FY 2009-10 have been approved by the Commission vide its Order dated June 15, 2009. These forecasts included 500 MW allocation of power from TPC-G. RInfra-D is presently before the Commission under Case No. 13 of 2010 wherein it has been argued by RInfra-D that TPC-G has been abusing its dominance in generation business to the detriment of RInfra-D's consumers. The matter is presently sub-judice and RInfra-D would therefore, not comment any further on the issue. Simultaneously, RInfra-D is also before the Commission in the matter of approval of its Power Purchase Agreements for Medium Term and Long-Term power commencing from FY 2011-12.

The estimates of FY 2010-11 include allocation from TPC-G based on the GoM Memorandum dated May 7, 2010, which has continued for the year as such. The cost of power assumed from bilateral sources is based on the actuals of first six months of FY 2010-11 and estimates of the next six months, which are in turn, based on the contracts that RInfra-D has entered into for power purchase and the estimates of power prices in the Energy Exchanges. The price of power in external markets/energy exchanges have remained low during FY 2010-11, consequently, the actuals and estimates for FY 2010-11 are not likely to be very different.

RInfra-D submitted that the issue related to TPC-G Capacity has been extensively explained in RInfra-D's earlier Tariff Petitions. This issue has also been addressed in the investigation report of ASCI. The issue has been comprehensively again explained in RInfra-D submissions in Case No 13 of 2010. Moreover, all purchases made by RInfra-D from external markets are economical and efficient as has also been observed by the Investigative Agency appointed by the Commission, the report of which is available on Commission's website.

RInfra-D submitted that the five-year Power Procurement Plan shall depend on the outcome of the proceedings presently before the Commission in Case No. 12, 13 and 29 of 2011.

### **Commission's Ruling**

The Commission has elaborated its rationale on this issue in Section 5.5.4 of this Order.

## **2.4 RENEWABLE ENERGY**

Shri Vinayak Joshi and Shri K. R. Nevrekar submitted that RInfra-D has not met its RPO targets, hence, RInfra-D should be charged some penalty for consistently not achieving RPO targets, and further failure to meet these targets in FY 2010-11 should not be loaded on to the consumers.

Shri Ulhas Chaudhary submitted that since RInfra-D has achieved only 23% of its RPO obligation, RInfra-D should be penalised for the same under separate account (CDM) which shall be recovered in future. Also RInfra-D should enter into long-term power purchase agreements to procure renewable power at cheaper cost.

### ***RInfra-D's Response***

RInfra-D submitted that it has not been able to procure power from renewable energy sources in FY 2008-09 because of shortage of RE power in the State of Maharashtra. This issue has already been settled vide the Commission's Order in Case Nos. 122 and 125 of 2008, wherein the Commission has been kind enough to waive the RPO targets for distribution licensees for the period FY 2007-08 to FY 2009-10 on account of, inter alia, lack of availability of RE power. As regards FY 2010-11, RInfra-D will meet its RPO targets pursuant to the Commission relaxing the requirement (under Regulation 7.2 of RPO-REC Regulations, 2010) of purchase of Renewable Energy only at the Commission determined tariff, under Case No. 45 of 2010. RInfra-D has included its purchase of RE power in FY 2010-11 in the short-term, under bilateral purchases shown in the Petition, in addition to the long-term purchases of 144 MU of RE projected for FY 2010-11. RInfra-D submitted that upto December 2010, it has purchased a total of 427 MU of power from RE sources, which includes 111 MU from long-term sources and the balance 316 MU from short-term sources. It is expected that for FY 2010-11, RInfra-D shall meet its Non-Solar RPO target. In view of inadequacy of Solar RE, RInfra-D requisitioned Solar REC in IEX in its first trading session on 30th March. However, the bid was unsuccessful as there were no sellers for solar RECs.

### **Commission's Ruling**

The Commission has considered the actual purchase from Renewable energy sources for FY 2008-09 and FY 2009-10 as submitted by RInfra-D, as per the Commission's Order dated August 7, 2009 in Case No. 125 of 2008 modifying the RPS percentage requirement for FY 2007-08, FY 2008-09 and FY 2009-10.

As regards RPS target for FY 2010-11, the Commission has considered 6% of total power procurement to be purchased from Renewable Energy sources out of total power purchase quantum in accordance with MERC (Renewable Purchase Obligation, its compliance and implementation of REC Framework) Regulations, 2010. The details of power purchase considered by the Commission have been elaborated in Section 5.5.3 of this Order.



## **2.5 OPERATION & MAINTENANCE (O&M) EXPENSES**

Shri Sandeep Ohri submitted that average inflation rate has been considered for calculating projections of Employee Expenses, A&G Expenses and R&M Expenses for FY 2010-11. He asked RInfra-D to provide average inflation rates for FY 2007-08, FY 2008-09 and FY 2009-10 and state reasons for deviation, if any, in the increase in these particular expenses for each of these years in respect of each of these expenses.

### ***RInfra-D's Response***

RInfra-D submitted that it has considered the escalation rates as approved by the Commission in the Tariff Order for RInfra-Transmission in Case No. 100 of 2009, for estimation of expenses for FY 2010-11 under corresponding heads.

### **Commission's Ruling**

The Commission has deliberated on this issue in detail in Section 5.6 of this Order, while deliberating on each component of O&M expenses. The Commission rules that for FY 2010-11, the O&M expenses allowed by the Commission for FY 2009-10 under the provisional truing up for FY 2009-10 will be considered as the base and increase will be allowed strictly as per the CPI/WPI growth as applicable. Any variation between allowed expenses and actual expenses will be considered as a controllable gain/loss, and will be shared between the Utilities and the respective consumers, in accordance with Regulation 19 of the MERC (Terms and Conditions of Tariff) Regulations, 2005.

## **2.6 EMPLOYEE EXPENSES**

Shri Sandeep Ohri submitted that the Employee Expenses have increased 12% on account of shift attributed to moving from GPA structure to CTC. He asked RInfra-D to clarify how the calculation is different for GPA and CTC, the reason for this shift and the exact amount of 12% increase in DA.

Shri Sandeep Ohri submitted that RInfra-D has justified the increased employee expenses with the need to counteract high attrition. He asked RInfra-D to provide the attrition rate for each year from FY 2004-05 onwards.

### ***RInfra-D's Response***

RInfra-D submitted that GPA stands for Gross per Annum and CTC corresponds to Cost to the Company. GPA increments are annual. The DA component in the GPA Salary structure is

adjusted (increased) as per the DA index movement every month, as can be seen from the enclosed circular of Bombay Chamber of Commerce & Industry. In addition, revision in salary structure takes place, as per understanding with the Officers' Association after every four years. Such revision results in salary increase ranging from 35% to 40%. On the other hand, change in salary structure under CTC is generally governed by annual factors of inflation, market conditions and performance of the employees. The increase in expenses due to migration from GPA to CTC in FY 2007-08, reflects the adjustment of increase for the period expired before the next revision due in FY 2009-10. For example, salary of Rs 10,000 per month under GPA translates to Rs 11,800 per month under CTC (50% of the increase of say 36%), as per the adjustment explained above. The CTC salary structure includes the component of DA merged into it and therefore, there is no separate DA element for employees who have migrated to CTC.

RInfra-D submitted the attrition rate for each year from FY 2004-05 to FY 2009-10.

### **Commission's Ruling**

The Commission has deliberated on this issue in detail in Section 5.6.1 of this Order, while deliberating on employee expenses. For FY 2009-10, the Commission has accepted the justification submitted by RInfra-D for increase in employee expenses. Ex-Gratia Payments has increased by Rs 2.7 Crore, however, RInfra-D has explained an increase of only Rs 1.63 Crore, thus, the increase of Rs 1.07 Crore has not been justified by RInfra-D. Also, Other Allowances have increased by Rs 23.90 Crore, however, RInfra-D has explained an increase of only Rs 20.02 Crore, thus, the increase of Rs 3.88 Crore has not been justified by RInfra-D. The Commission has approved the actual Employee expenses except the unjustified amount of Rs 4.95 Crore.

The Commission rules that for FY 2010-11, the employee expenses allowed by the Commission for FY 2009-10 under the provisional truing up for FY 2009-10 will be considered as the base and increase will be allowed strictly as per the CPI/WPI growth as applicable. Any variation between allowed expenses and actual expenses will be considered as a controllable gain/loss, and will be shared between the Utility and the consumers, in accordance with Regulation 19 of the MERC (Terms and Conditions of Tariff) Regulations, 2005.

## **2.7 ADMINISTRATION & GENERAL EXPENSES**

Shri Sandeep Ohri submitted that A&G expenses have increased on a number of counts. He asked RInfra-D to provide details of new premises that are being used as godowns, break-up of the Rs. 1.20 Crore spent on new customer mailers, details of increase in Security Charges of Rs. 1.81 Crore attributed towards increase in deployment and increase in installations.

Shri N. Ponrathnam submitted that RInfra-D should show separately the legal charges incurred for the cases filed in ATE and Supreme Court against the Commission's Orders, as well as the legal charges incurred for the cases initiated against/by individual consumers in various forums.

***RInfra-D's Response***

RInfra-D submitted that a new godown has been taken up at Kurla, to centralize O&M and Capex stores. RInfra-D further submitted that the amount referred to by the objector relates to increase in total printing and stationary expenses and does not represent the cost only towards new consumer mailers. RInfra-D further submitted the details of increase in security charges.

RInfra-D submitted that the details of A&G expenses given in Form 3.2 of the ARR petition includes legal expenses incurred by the licensee for Wires Business and Retail Supply Business.

**Commission's Ruling**

The Commission has deliberated on this issue in detail in Section 5.6.2 of this Order, while deliberating on A&G expenses. For FY 2009-10, the Commission has accepted the justification submitted by RInfra-D, and approved the actual A&G expenses. The Commission rules that for FY 2010-11, the A&G expenses allowed by the Commission for FY 2009-10 under the provisional truing up for FY 2009-10 will be considered as the base and increase will be allowed strictly as per the CPI/WPI growth as applicable. Any variation between allowed expenses and actual expenses will be considered as a controllable gain/loss, and will be shared between the Utilities and the respective consumers, in accordance with Regulation 19 of the MERC (Terms and Conditions of Tariff) Regulations, 2005.

**2.8 INCOME-TAX COMPUTATION**

Shri Sandeep Ohri asked RInfra-D to submit the Income Tax amounts for FY 2008-09, FY2009-10 and FY 2010-11, calculated by the existing method as no change should be permitted till such time the Hon'ble ATE passes any Order.

***RInfra-D's Response***

RInfra-D submitted that the submissions made by RInfra-D reflect the calculation of tax which is received as income and gets charged to tax, whereas, the Commission in its earlier Order has taken a direct calculation of tax, as if such amount is free of tax. RInfra-D further submitted that MYT Regulations have been issued by the Commission wherein Income tax is not considered to be recovered as part of the revenue, but as a separate line item in the bill as "reimbursement" of Income Tax. It would therefore, be understood that the Commission intends to treat the Income

Tax on the same lines as Electricity Duty and Maharashtra Tax on Sale of Electricity as reimbursement and not include as part of income (revenue) for ARR.

### **Commission's Ruling**

The Commission has computed Income Tax according to the procedure detailed in the ATE Judgment in Appeal No. 173 of 2009 dated February 15, 2011 and Appeal No. 174 of 2009 dated February 14, 2011. The details of Income Tax considered for FY 2008-09 are elaborated in Section 4.12 of this Order, and details for FY 2009-10 and FY 2010-11 are discussed in Section 5.13 of this Order.

## **2.9 CAPITAL EXPENDITURE**

Shri Sandeep Ohri submitted that the compliance report detailing benefits of all capex schemes since FY 2004-05 has been submitted to the Commission by RInfra-D vide letter dated November 24, 2009. He added that RInfra-D should clarify whether the Commission has 'accepted' these benefits as being valid. If there is no such explicit acceptance from the Commission, the amount of Rs. 285.29 Crore should not be treated as total actual capitalization and all numbers need to be reworked accordingly.

### ***RInfra-D's Response***

As per the Commission's directive in the Tariff Order dated 15th June 2009, RInfra-D has submitted the required reports for Capital Expenditure to the Commission.

### **Commission's Ruling**

The Commission upon analysis of the aforementioned Compliance Report submitted by RInfra-D, has revised the capitalisation for FY 2007-08, and has allowed the full capitalisation of Rs. 285.29 Crore for FY 2008-09 as claimed by RInfra-D and the impact of the same has been considered in the present Order.

### **2.10 DEPRECIATION**

Shri Sandeep Ohri submitted that since the FY 2010-11 is over on March 31, 2011, RInfra-D may provide full details of depreciation based on assets that have been commissioned.

#### ***RInfra-D's Response***

RInfra-D submitted that the details of actual depreciation for FY 2010-11, shall be furnished at the time of truing up of FY2010-11 as provided under the MERC Tariff Regulations, 2005.

### **Commission's Ruling**

For FY 2010-11, the Commission has computed the depreciation based on the average of Opening GFA and Closing GFA arrived at by considering the approved capitalisation for the year.

### **2.11 LOAN REPAYMENT SCHEDULE**

Shri Sandeep Ohri submitted that the normative loan repayment tenure is stated to be 10 years for FY 2004-05 and FY 2005-06 and 20 years from FY 2006-07 onwards. He asked RInfra-D to explain the reason for this change.

#### ***RInfra-D's Response***

RInfra-D submitted that the assumptions are in line with the directives of the Commission in previous Tariff Orders, i.e., 1) MERC Order in Case No. 25 of 2005 and 53 of 2005, dated October 3, 2006, 2) MERC Order in Case No. 66 of 2007, dated June 4, 2008, and 3) MERC Order in Case No. 121 of 2008, dated June 15, 2009.

### **Commission's Ruling**

As regards the tenure of loan, it is clarified that the Commission has considered the tenure of normative loan for previous years and ensuing year on the basis of the MERC Tariff Regulations and the Commission's previous Orders in this regard, and the same has been elaborated in detail in Section 4.8 and Section 5.9 of this Order.

## **2.12 DISTRIBUTION LOSS AND TRANSMISSION LOSS**

Shri A.R. Bapat submitted that the distribution loss for FY 2009-10 has reduced to 10.08% as against 11.60% considered by the Commission. He further submitted that RInfra-D has considered the distribution loss of 10.25% for FY 2010-11 as against 10.08% for FY 2009-10, which will inflate power purchase.

Shri N. Ponrathnam and others submitted that the Aggregate Technical & Commercial Losses should be less than 5% and losses above this level should not be considered by the Commission. He further submitted that MSLDC has given transmission loss of the State but RInfra-D procures power even from outside the State; and losses incurred on account of power procurement from outside the State should to be shown separately to the Commission.

### ***RInfra-D's Response***

RInfra-D submitted that RInfra-D has focused on controlling distribution losses so that the benefit of the same can be shared with consumers. Even in the past RInfra-D has made attempts to reduce the losses vis-a-vis the target set by the Commission for the benefit of consumers. RInfra-D submitted that for FY 2010-11, it has considered the standard decrement loss reduction trajectory of 0.25% and in case the actual distribution losses are lower than the target of 10.25%, the benefit will be automatically passed to the consumers owing to lower power purchase cost.

RInfra-D submitted that it has provided all the details about distribution and transmission losses in the formats prescribed by the Commission. RInfra-D further submitted that the transmission losses for power procured from outside the State are accounted by RLDC.

### **Commission's Ruling**

For FY 2010-11, the Commission has considered the normative distribution loss of 10.25% for RInfra-D. In the APR Order for RInfra-D dated June 4, 2008 in Case No. 66 of 2007, the Commission has specified the distribution loss levels as 10.75% for FY 2008-09 by considering a target loss reduction of 0.25% over the target loss level for FY 2007-08 (11%). Following the loss trajectory, target distribution loss for FY 2010-11 stands at 10.25%. The Commission has deliberated on this issue in detail in Section 5.1.1 of this Order.

## **2.13 INTEREST ON WORKING CAPITAL AND CONSUMERS' SECURITY DEPOSIT**

Shri Sandeep Ohri submitted that RInfra-D has considered interest on the amount of funding of working capital done via internal accruals, and the principle behind the same needs to be

elaborated by RInfra-D or the Commission. If a Distribution License is funding its own working capital through internal accruals of any amount, this would “deprive” them of earning “market--based returns” on the same amount, elsewhere. This ‘opportunity loss’ is being calculated based on the SBI PLR and the Distribution License would be entitled to claim the interest amount when calculating revenue requirement. By the same logic, the amount of moneys held by the Petitioner as ‘Security Deposit’ should also be calculated at the SBI PLR rate and accordingly given to consumers, since they could have ‘invested’ it elsewhere and are incurring a similar ‘loss’.

### ***RInfra-D’s Response***

RInfra-D submitted that the rate of interest on Consumer Security Deposit is in accordance with the Regulation No. 76.8.3 of MERC Tariff Regulations 2005 and Orders issued thereunder.

### **Commission’s Ruling**

The interest on working capital and Consumers’ Security Deposit has been computed in accordance with the MERC Tariff Regulations and the ATE Judgments in this regard. The Commission’s computations in this regard have been elaborated in Section 4.9 and 5.10 of this Order.

## **2.14 SECURITY DEPOSIT REFUNDED**

Shri Rakshpal Abrol submitted that RInfra-D has not given the information on number of consumers changed over to TPC and the security deposit refunded.

### ***RInfra-D’s Response***

RInfra-D submitted that the information on changeover consumers is provided in the Public Notice published on March 05, 2011 in various National and Regional dailies, however, RInfra-D did not submit the details of security deposit refunded.

### **Commission’s Ruling**

For the purposes of this Order, the Commission has considered the change-over sales quantum in accordance with the sales quantum considered in TPC-D Order, as migrated from RInfra-D. The actual quantum of change-over sales will have to be tried up based on actuals for the year. As regards the Security Deposit refunded, this information is not relevant to the present exercise. In case any change-over consumer has not received the security deposit due for refund, then such consumer should get the same addressed through the Grievance Redressal mechanism outlined in the relevant Regulations notified by the Commission. The Commission has considered the security deposit available with RInfra-D for the computations of working capital interest and

interest on consumers' security deposit.

## **2.15 INCOME FROM REGULATED BUSINESS / OTHER BUSINESS**

Shri Vinayak Joshi and Shri K. R. Nevrekar submitted that the Commission should not allow misuse of regulatory assets which RInfra-D is acquiring from consumers for augmenting its wires/supply network facility. They added that they would like to know the steps taken by the Commission to ensure that income generated in regulated business is used in regulated business only.

### ***RInfra-D's Response***

RInfra-D submitted that Reliance Communication Ltd (RCom) had an existing contract with the BEST for use of their receiving station premises for installation of communication towers. When RCom approached RInfra-D for the same, RInfra-D ensured that the contracts terms, including lease rent are kept same as their contract with BEST. RInfra-D is legally entitled, as per the Act and the MERC Tariff Regulations, to utilize its distribution assets for use by other business for better utilization of its assets and use part of the income so generated for reduction in ARR. RInfra-D has accordingly shown the likely income from this transaction in the ARR of FY 2010-11.

### **Commission's Ruling**

The Commission has considered income from other business as per MERC Tariff Regulations, 2005.

## **2.16 WHEELING LOSSES**

TPC-D submitted that the Commission had prescribed wheeling losses for change-over consumers. The Commission arrived at the wheeling loss after excluding the commercial loss, therefore, the loss level of 1.5% and 9% for LT and HT consumers reflect only the technical wheeling loss. TPC-D further submitted that, in the Order dated October 15, 2009, the Commission has provided the mechanism to address the issue of commercial loss as extracted below:

*"12 (ii.) Meter Reading*

*The Commission is of the view that meter reading for consumer billing purposes should be done by the TPC-D. Since TPC-D will be responsible for billing and collection for the*



*changeover consumers and the meter reading is an integral part of bill preparation, hence meter reading for billing purposes by TPC-D is necessary. It is also aligned with its accountability towards consumers. However, to enable RInfrac-D to cross-verify TPC-D's readings, which is a critical input for computing its distribution loss, TPC-D will provide meter reading information for changed-over consumers to RInfrac-D on a daily basis along with the date and time of the meter reading.*

.....

*vii. Theft and inspection*

*..... The Commission observes that any theft by meter tampering or bypassing meter leads to increased distribution losses for RInfrac-D and requires RInfrac-D to pay for this energy (representing increased distribution losses) in the Intra-State Pool at the System Marginal Price. To ensure that wheeling distribution licensee (RInfrac-D) is able to manage the distribution losses, it should have the right to inspect and read consumer meter from time to time for detection and investigation of theft by way of meter tampering or bypassing the meter.”*

Therefore, TPC-D submitted that the Commission may continue with the present methodology rather than apply the method of total loss as proposed by RInfrac-D.

***RInfrac-D's Response***

RInfrac-D submitted that the Petition very clearly brings out the impact on RInfrac-D's consumers if change-over consumers are made to pay only 9% (or 1.5%, as the case may be) losses as against actual losses. Fixing losses for wheeling, theoretically, makes the supply licensee immune to changes in commercial losses. Meter readings of change-over consumers are simply grossed up by theoretical wheeling losses fixed at 9% or 1.5%, as the case may be and the T<>D drawal of the supply licensee is determined. It automatically means that theft by change-over consumers or meter defects/errors/slow meters, etc. (causing commercial losses) are not captured as the T<>D drawal is arrived at by limiting the losses at theoretical levels of 9% and 1.5%. In practice, if there is more theft in the system or more errors or defects in consumer meters, there will be lesser output (consumption as recorded) for the same level of input (input power). However, if losses are pre-determined and fixed, the input will go down in tandem with the output, causing no loss at all to the supply licensee (as reduction in power purchase cost will offset loss of revenue). In other words, the supply licensee is practically immune to any commercial losses associated with change-over consumers.

RInfra-D added that due to this problem, even though the change-over consumers are practically the consumers of supply licensee, the supply licensee also does not have any incentive to prevent theft and all such responsibility will rest on the shoulders of the wheeling licensee. The Wheeling Licensee's customers are unfairly affected as the differential losses are passed on to be borne by them, for no fault of theirs. RInfra-D submitted that it strongly objects to such treatment of wheeling losses and requested the Commission to take corrective measures and prescribe that all losses of the distribution system will be borne by all consumers – own or change-over, without any discrimination.

### **Commission's Ruling**

The issue relating to wheeling losses of 9% at LT level has been challenged by RInfra-D before the ATE in Appeal No. 150 of 2009 and the ATE Judgment is still awaited. In light of the pending appeal, the Commission is not inclined to give any findings or further directions at this stage in relation to the same.

### **2.17 WHEELING CHARGES**

Mumbai International Airport Pvt. Ltd. (MIAL) submitted that RInfra-D has proposed wheeling charges to the tune of Rs. 0.62 per unit as against Rs. 0.46 per unit approved by the Commission in its Order dated July 22, 2009. Thus, 30% increase is proposed in the existing wheeling charges, which will make changeover unviable, and burden consumers.

Shri Vinayak Joshi, Shri K. R. Nevrekar and others have objected to the proposal of RInfra-D stating that it is another attempt to dissuade consumers from changing over to TPC. Objectors added that the wheeling charges may not be increased on annual basis and should not be reviewed for next three years.

Shri N. Ponrathnam and Indian Hotel and Restaurant Association (AHAR) submitted that the calculation of wheeling charges has not being submitted by any of the distribution companies for vetting by the Commission and most of the Orders say that the value given by the Petitioner on oath is taken to be true.

### ***RInfra-D's Response***

RInfra-D submitted that the wheeling charges for FY 2009-10 fixed vide Tariff Order dated June 15, 2009 were Rs. 108 per kW per month. These charges were later converted to Rs. 0.46 per unit vide Order dated July 22, 2009. The conversion was done by the Commission in order to enable easier billing for change-over consumers. The methodology for conversion from

denomination of Rs. per kW per month to Rs. per unit was not explained in the said Order. However, it can be reasonably assumed that a proxy Load Factor value would have been used for this purpose. On the other hand, RInfra-D has, while proposing wheeling charges in the present Petition, has employed total wheeled energy in MU as projected in its Petition at HT and LT level and used these values to distribute the cost of network between HT and LT voltage levels. Conversion of kW based charges into unit based charges using assumptions on Load Factor and determining the charges while using energy (units) itself as the basis of distributing costs as done by RInfra-D will yield different results. However, it is RInfra-D's contention that if the charges are to be recovered on wheeled energy, they need to be determined using wheeled energy only as only that will ensure full recovery of cost. In simpler words, the basis of cost allocation and the basis of cost recovery need to be same to ensure full recovery of costs.

RInfra-D submitted that there are other reasons for increase in wheeling charges. The wheeling charges determined by the Commission included approved costs, which did not include actual capitalization of assets (and consequently depreciation, interest costs and return) and other disallowances, while the costs projected by RInfra-D for FY 2010-11 include actual capitalization of assets and the estimated incurrence on O&M and other costs during FY 2010-11.

RInfra-D submitted that the detailed working for wheeling charges has been submitted in the Petition. The wheeling charges computation is consistent with MERC Tariff Regulations, 2005 and methodology adopted by the Commission in its various Tariff Orders.

### **Commission's Ruling**

The Commission has not determined wheeling charges for FY 2010-11, as FY 2010-11 is over, and the wheeling charges shall now be determined for FY 2011-12 under MERC MYT Regulations, 2011.

## **2.18 RECOVERY OF REGULATORY ASSETS**

TPC-D objected to RInfra-D's proposal to recover its past revenue gaps and regulatory assets from migrated consumers as well as RInfra-D's own consumers. TPC-D submitted that RInfra-D's claim for recovery of regulatory assets and past revenue gaps from change-over consumers is based on the assumption that the consumers are captive to RInfra-D and shall forever remain tied to its business and its providences. There is no provision in the EA 2003, which entitles a distribution license to claim its past revenue gaps from someone who no longer is its consumer. The Distribution Licence is granted vis-a vis an identified area of supply and not with reference

to the consumer mix or load in such area of supply because the consumer mix by its very character would always be in a state of flux.

Further, TPC-D submitted that if a new consumer can be charged towards recovery of past revenue gap by reason of it being a consumer of the distribution licensee at the time of recovery, then by the same logic a person who is no longer the consumer of the licensee cannot be called upon to pay towards past revenue gaps. Also, some change-over consumers have been subsidizing consumers of RInfra-D and were paying much above the cost of supply, these consumers have been paying for the costly power purchased, which led to the revenue gap, and have not derived any benefit as alleged by RInfra-D.

MIAL objected to the recovery of regulatory assets and past revenue gaps from change-over consumers based on the following:

1. The Tariff Policy explicitly lays down the guidelines for creation of Regulatory Asset and mandates that the Regulatory Asset should be created only as an exception.
2. EA 2003 does not have any provision to claim past revenue gaps from a person who is no longer its consumer or is not receiving electricity from it.
3. It is an accepted fact that the consumer mix of a distribution licensee is dynamic in nature and keeps on changing over time.
4. The tariff of the distribution licensee can only be fixed in relation to its existing consumers.
5. MIAL has always been in the category, which has cross subsidized other consumer categories of RInfra-D.
6. EA 2003 envisages promotion of competition in the electricity sector by providing for multiple distribution licensees within the same area of supply.

Shri Vinayak Joshi, Shri K. R. Nevrekar and AHAR objected strongly to RInfra-D's proposal to recover the past revenue gaps over a period of 3 to 5 years from migrated consumers. The deferred revenue gap is the outcome of inefficient operations of RInfra-D in spite of directives by the Commission to execute long term PPA. The consumers should not be asked to pay for the distribution licensee's consistent failure.

Shri. P. N. Sridharan submitted that compensating RInfra-D due to consumers migrating to cheaper power should be strongly desisted.

Shri A.R. Bapat submitted that RInfra-D has projected a cumulative revenue gap of Rs. 2376 Crore, which is not proposed to be recovered in FY 2010-11, however, it will be recovered in the

forthcoming years resulting in tariff shock to consumers. Shri A.R. Bapat requested that the migrating consumers should also bear their share of past costs as proposed by RInfra-D.

During the Public Hearing, Shri Bhupendra Shelar, Shri Ravindra Kadam and several individual consumers submitted that the Commission may issue a methodology in the interest of the small consumers and not burden them by recovery of the huge regulatory asset of RInfra-D. Although RInfra-D has not proposed tariff hike in the current Petition, it seeks approval for formation of regulatory asset, which may be recovered from existing consumers going forward.

### ***RInfra-D's Response***

RInfra-D submitted that the Regulatory Asset/ Past Revenue Gap is made up entirely of costs, which were earlier deferred for recovery by the Commission, allowed later by Hon'ble ATE rulings and revenue gap created only because costs could not be recovered from consumers due to stay on retail tariffs. The Commission and ATE allow costs to the distribution licensee after going through necessary prudence checks, which itself means that the allowed costs cannot be considered inefficient. Further, the accumulated gap in FY 2009-10 is simply because approved costs could not be recovered due to the stay on retail tariffs. None of the components of the Regulatory Asset/Revenue Gap can therefore, be termed as having arisen due to inefficiency of the licensee.

RInfra-D submitted that to avoid tariff shock to the consumers from the tariff so determined to recover the cost of the licensee, Regulatory Assets are proposed to be created. The purpose and intent of early recovery of Regulatory Asset is primarily to prevent future consumers from having to pay towards the past cost, which is attributable to a particular set of consumers.

RInfra-D submitted that it has not proposed tariff hike in FY 2010-11 and the Commission may decide the manner in which the past period revenue gaps would be recovered. RInfra-D stated that since the changeover consumers had derived benefits when they were consumers of RInfra-D, they ought to bear their fair share in the past period costs. This, in RInfra-D's opinion, will be fair to the balance consumers of RInfra-D as the costs, which make up the revenue gaps are those that were incurred to serve those consumers also, who have now migrated to the other distribution licensee.

### **Commission's Ruling**

This Petition has been filed for approval of ARR and tariff determination for FY 2010-11, however, the said year is over and the tariff for the same cannot be determined now.

The Commission has given its ruling on the issue of recovery of regulatory assets from consumers who have migrated and would be migrating in Section 6.3 of this Order.

## **2.19 AVERAGE COST OF SUPPLY**

Shri N. Ponrathnam asked RInfra-D to submit the reason for high Average Cost of Supply for RInfra-D, and suggested that the unreasonable amount collected from the consumers should be refunded.

### ***RInfra-D's Response***

RInfra-D submitted that though ACoS (including past cost) was Rs. 7.70/kWh for FY 2009-10, the approved Average Revenue Realisation allowed was Rs. 0.63/kWh lower at Rs. 7.06/kWh. Out of the ACoS of Rs. 7.06/kWh considered by the Commission, only Rs 6.36/kWh reflected the current year cost, the balance amount of Rs 0.70/kWh was towards recovery of past period cost.

Further, 80% (Rs 5.09/kWh) of the standalone ACoS of Rs 6.36/kWh was towards power purchase cost, which is uncontrollable for the reasons mentioned in various past proceedings before the Commission.

### **Commission's Ruling**

The Commission is also concerned with the high cost of supply of RInfra-D, which is largely attributable to the high cost of power purchase, which in turn, is attributable to RInfra-D's failure to enter into long-term/medium-term power purchase agreements at optimum rates.

## **2.20 FUEL ADJUSTMENT CHARGES (FAC)**

Shri N. Ponrathnam submitted that change in cost due to power procured from traders, which has no linkage to fuel cost, is being added to the FAC calculations, which is a violation of Section 62(4) of Electricity Act 2003. In the formula,  $FAC (Rs\ crores) = C + I + B$ , Where  $C = \text{Change in cost of own generation and power purchase due to variation in the fuel cost}$ , Variation in the fuel cost has been missed out completely in the formula.

This issue continues as Z factor in the new MYT Regulations is also not in line with the spirit of the provision of Section 62(4) of Electricity Act 2003.

### ***RInfra-D's Response***

RInfra-D submitted that FAC formula includes variation on account of fuel cost, while Z-factor will facilitate the recovery of uncontrollable variations periodically.

### **Commission's Ruling**

The issue is not relevant to the scope of the present Petition.

## **2.21 ELECTRICITY DUTY AND TAX ON SALE OF ELECTRICITY**

Shri N. Ponrathnam, Shri Sandeep Ohri and others submitted that category-wise details of Tax on Sale of Electricity (ToSE) and Electricity Duty paid to the Government should be provided by RInfra-D.

### ***RInfra-D's Response***

RInfra-D submitted the ToSE and Electricity Duty are charged as per Maharashtra Tax on Sale of Electricity Act, 1963 and Bombay Electricity Duty Act, 1958 respectively. RInfra-D submitted the details of ToSE and Electricity Duty for FY 2008-09 and FY 2009-10 as audited by the office of the Chief Engineer (Electrical Engineer, PWD) periodically. RInfra-D added that the Chief Engineer (Electrical Engineer, PWD) submits this report to CAG.

### **Commission's Ruling**

The levy of ED and TOSE are not within the purview of the Commission, and the State Government is empowered to levy such duties and taxes. The stakeholders may obtain the desired data from the State Government.

## **2.22 CONSUMER CATEGORISATION**

Jankalyan Developers submitted that it is required to take temporary electricity supply from the Licensees in the area at the time of development of property. Although it is termed as temporary supply, the duration of such supply is between 24 to 36 months. At the completion of the project, regular supply is also taken from the same licensee. Hence, LT Temporary category (for building construction sites) tariff should be at par with LT Commercial tariff, however, temporary consumers are charged 225% of COS as against 130% of COS charged to Commercial category.

Shri N. Ponrathnam submitted that the categorisation of consumer categories has been changing over the years since the existence of Bombay Suburban Electric Supply Limited. He added that

the concept of connected load was removed and concept of sanctioned load and contract demand introduced. Shri N. Ponrathnam submitted that categorization has been used by RInfra-D to manipulate the accounts for better recovery. He requested the Commission to direct RInfra-D to refund the cost levied to the low tension consumers (industrial and commercial) as demand charge and the exorbitant charge levied to consumers categorized as Advertisement & hoarding category on priority. He further requested the Commission to direct RInfra-D to propose tariffs to reflect cost of supply, and stop the discrimination between industrial consumers and commercial consumers. There should be only two types of classification of consumers, viz., one as High Tension / Low Tension and other as consumer paying the cost of supply /consumer paying subsidized rate as determined by the Government under Section 65 of the Electricity Act, 2003. All low tension categories should be merged and have only two categories, viz., one residential and other non-residential.

### ***RInfra-D's Response***

RInfra-D submitted that tariff determination and categorisation are the prerogatives of the Commission. RInfra-D only implements the tariff structure and rates as approved by the Commission and presently, electricity supply for any construction work is classified under temporary category as per the approved tariff schedule.

RInfra-D submitted that it has implemented the Tariff Regulations and directives of the Commission and other statutory bodies and therefore, strongly objects to the objector's comments that creating more categories allows RInfra-D to manipulate the revenue, and calls upon the objector to substantiate the same.

### **Commission's Ruling**

While undertaking the differentiation between the tariff categories and rationalization of the same, 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.”*

While determining the tariff, reasonable costs incurred by the Utilities have to be met, and



irrespective of the number of consumer categories or the sub-classification considered in accordance with the provisions of Section 62(3) of the EA 2003, the cross-subsidies have to be reduced gradually and the tariff differential between categories cannot be very significant in the long-run.

Further, the Commission has elaborated its detailed rationale as regards consumer categorisation in its previous Orders, and does not see any merit in repeating the same in this Order.

As regards categorisation of construction projects, the Commission has consciously categorised the same under 'temporary others category' for all distribution licensees in the State of Maharashtra.

Moreover, in this Order, the Commission is neither revising the categorisation nor the tariff for any category for FY 2010-11, as the year is over.

### **2.23 CROSS-SUBSIDY**

Shri Vinayak Joshi, Shri K. R. Nevrekar and Shri N. Ponrathnam submitted that the average cost of supply (ACOS) for FY 2010-11 works out to Rs. 6.62 per unit. As per Tariff Policy and ATE Judgment, the tariffs should be within  $\pm 20\%$  of the ACOS by the end of FY 2010-11. The objectors submitted that RInfra-D is not in a position to reduce the cross-subsidy level due to high power purchase cost and rising administrative and other expenses. They further suggested that the maximum tariff should be Rs. 7.95 per unit (ACOS + 20%) or as the case may be and the residual loss should be borne by RInfra-D as it is outcome of its failure to take effective steps to reduce cross-subsidy level.

#### ***RInfra-D's Response***

RInfra-D submitted that subsidy is envisaged when tariff rates are determined by the Commission for some categories of consumers at a price lower than the cost of supply. Such consumers are called subsidised consumers and there are around 22 lakh such consumers in RInfra-D area. In order to balance the revenue shortfall, the remaining consumers' tariff fixed by Commission is higher and these consumers are called subsidising (contributing) consumers. This self-balancing mechanism is the cross-subsidy mechanism, which is essential to balance the Revenue. This balancing mechanism would provide balance if there are no unsettling events such as selective drawal (migration) of contributing (subsidising) consumers.

Such a migration of contributing (subsidising) consumers during the year would create an

imbalance in revenues and total revenues at the end of the year would be lower than that approved. This gap represents the cross subsidy contribution that was expected to be contributed by migrated contributing (subsidising) consumers. In order not to burden the subsidised consumers, it would be essential that this revenue loss is continued to be contributed by migrating consumers. Obviously, if this is not done, the loss in revenue will get passed on to the balance consumers of the licensee in the subsequent year, causing their tariffs to rise beyond affordable limits. In order to mitigate this, RInfra-D is seeking levy of Cross-subsidy Surcharge from the migrating contributing consumers.

Cross-subsidy is a function of tariff setting and a feature by which tariffs of lower end consumers are kept lower than the cost of supply and the under-recovery of ARR is compensated by increasing the tariffs of higher end consumers above cost of supply. Hence, if the maximum tariffs are kept at the level of +20% of average cost of supply, the minimum tariffs will also have to be kept at a minimum -20% of average cost of supply. This would amount to an increase in tariffs of residential consumers. Furthermore, the objector is not making a correct comparison. The Average Cost of Supply for FY 2010-11 as shown in the petition is Rs. 6.62 per unit, but this figure does not include any cost of the past periods. However, the Average Cost of Supply approved by the Commission for FY 2009-10 was Rs. 7.06 per unit, which included past period costs as well (previous regulatory assets, carrying costs and true-up gap of FY 2007-08). If past costs are removed, the approved ACoS for FY 2009-10 would only be Rs. 6.35 per unit. Accordingly, since the tariffs in FY 2010-11 are kept at the same level as FY 2009-10 approved level, they have moved closer to the cost of supply. Therefore, RInfra-D's proposal in this petition to maintain the present tariff rates for FY 2010-11 has attempted to bring the tariffs relatively closer to the cost of supply, as required under the Tariff Policy and the EA 2003.

### **Commission's Ruling**

In accordance with the provisions of Section 61(g) of EA 2003, the cross-subsidies have to be reduced gradually without giving tariff shock to the consumers and the tariff difference between different categories cannot be very significant in the long run. If the cross subsidy is immediately reduced to +/-20%, it may lead to tariff shock to the consumers. However, in this Order, the Commission has not re-determined the tariffs for FY 2010-11 since the year is over, and hence, no targeted reduction in cross-subsidy is possible in FY 2011-11. For future years, RInfra-D will have to propose the tariff of different consumer categories, keeping in mind the un-recovered revenue gap, prevailing tariffs and cross-subsidy, and targeted reduction in cross-subsidy. As regards direct subsidy to be given by the State Government, it is the prerogative of the State Government.

## **2.24 CROSS-SUBSIDY SURCHARGE**

MIAL, TPC-D, Shri Vinayak Joshi, Shri K. R. Nevrekar and others strongly objected to the levy of Cross Subsidy Surcharge (CSS) and submitted that RInfra-D has made no attempts to reduce the cross-subsidy level, though over the last several years, consumers have been constantly pleading to bring down the power purchase cost. RInfra-D has not even adhered to the directives of the Commission to enter into long-term PPA. The objectors added that changeover consumers are paying tariff determined by the Commission and TPC has neither offered any special discount nor any cherry-picking. The objectors submitted that RInfra-D cannot ask for recovery of revenue gap from change-over consumers who have already suffered for being with RInfra-D.

Shri Vinayak Joshi, Shri K. R. Nevrekar and others submitted that RInfra-D can supply power only to the extent of 3786 MU as available from DTSP. RInfra-D has not entered into any other long-term PPA, hence, CSS should be considered only when demand goes below 3786 MU.

TPC submitted that, as per Section 42(2) of the EA 2003, CSS can be claimed for open access consumers and not from changeover consumers. After changeover, the changeover consumers have no relationship with RInfra-D. CSS, in any manner, cannot be passed on and recovered from the change-over consumers of TPC-D. MIAL submitted that the proposal of CSS from changeover consumers who are now consumers of another distribution licensee is not tenable in law. Further, Section 42(2) cannot be invoked to charge CSS from MIAL since it is not an open access consumer of RInfra-D but a consumer of TPC-D.

MIAL submitted that the claim of RInfra-D is illegal, unreasonable and discriminatory since it is imposed only on changeover consumers of TPC-D who are using wires of RInfra-D. After disconnecting from RInfra-D, consumers might have shifted to other areas. MIAL has changed over after clearing all the existing dues of RInfra-D and its relationship as a consumer of RInfra-D stands completely severed.

TPC-D submitted that as per the provisions of the EA 2003, where there is more than one distribution licensee operating in the same area, consumers have the right to change/migrate from one licensee to another. Levy of charge in the form of CSS would stifle competition in retail supply and dissuade consumers from exercising their right to have a supplier of their choice.

TPC-D submitted that change over consumers have no relation with RInfra-D, and if RInfra-D's

claim for charging CSS to changeover consumers is allowed, it would amount to TPC-D's consumers subsidizing RInfra-D consumers for the inefficiency of RInfra-D in effectively planning its power procurement at reasonable costs.

MIAL and TPC-D submitted that cross subsidy is not an element of cost but an element of tariff design, which cannot be treated as a source of revenue for the distribution licensee. It is submitted that any loss on account of migration should be addressed through truing up and recovered from existing and future consumers and cannot be recovered from migrated consumers. MIAL submitted that recovery of CSS from changeover consumers is unheard of and is contrary to the principles underlying determination of tariff. Cross subsidy is charged inter-se between different categories of consumers of a particular distribution licensee. It cannot be charged to consumers who have migrated to a different distribution licensee.

TPC-D submitted that once a consumer terminated the relationship with a distribution licensee, it severs all ties between the consumer and the distribution licensee. The Commission can provide an element of cross-subsidy in tariff but it cannot extend the same to third parties who are not the consumers of the distribution licensee. Therefore, the claim of recovery of CSS from changeover consumers is not tenable in law.

TPC-D submitted that even on facts, RInfra-D has failed to make out a justifiable or sustainable case for losses, if any, suffered by it towards cross-subsidy due to migration of its subsidizing consumers and for consequential recovery of such losses from the changeover consumers. TPC-D submitted that there is no actual loss to RInfra-D due to changeover consumers, and in fact, migration of consumers from RInfra-D to TPC-D has contributed to reducing the revenue gap of RInfra-D, as can be seen from the computations submitted by TPC-D in this regard.

MIAL submitted that the EA 2003 envisages promotion of competition in the same area of supply. The consumers have the right to choose their distribution licensee. In this case, where MIAL has changed over, any attempt by RInfra-D to load the changeover consumers with CSS will affect the right of the consumers and burden the consumers with illegal cost incurred due to failure of RInfra-D to operate in an efficient manner. Being a consumer of RInfra-D, MIAL has paid high HT tariff resulting from high power procurement cost and resultant high average cost of supply.

MIAL submitted that it has changed over to a more competitive distribution license for availing supply of power at lower rates. It is already paying the tariff determined for TPC-D consumers,

which includes cross subsidy element of TPC-D distribution area. Imposition of any CSS will be detrimental to the consumers' interest and will defeat the entire purpose of changeover of consumer from RInfra-D to TPC-D.

MIAL further submitted that the EA 2003 and National Electricity Policy envisage that cross subsidy shall be reduced progressively. In order to achieve the target, Tariff Policy specifically provides that by the end of 2010-11, tariffs of all categories of consumers should be within the range of  $\pm 20\%$  of the average cost of supply. Further, the Tariff Policy and NEP state that the State Government has the power to give subsidies to the extent they consider appropriate under Section 65 of the EA 2003. It is, therefore, held that direct subsidy is a better way to support the poorer category of consumers than the mechanism of cross subsidizing the tariff across the board. The entire focus and efforts should be towards reducing cross-subsidy. The relief sought by RInfra-D has the net effect of perpetuating the practice of cross subsidy and in reality hides the inefficiencies of RInfra-D at the cost and expenses of change-over consumers who end up paying for the operational inefficiencies and commercial imprudence of RInfra-D.

Shri Vinayak Joshi, Shri K. R. Nevrekar and others requested the Commission to reject the proposal of charging CSS as the formula proposed by RInfra-D in the Petition is a creation of its own, and is neither in line with the formula prescribed in the Tariff Policy nor as per the Commission's Order dated September 05, 2006 in Case No. 9 of 2006.

Shri A.R. Bapat submitted that the first approach for determination of CSS is less costly and appropriate; however, the second approach is inappropriate. It is worth considering whether CSS conflicts with Section 61 of EA 2003 encouraging competition.

TPC and MIAL submitted that in light of the ATE Order dated March 01, 2011 in Appeal No. 200 of 2010, CSS should be decided subsequent to the framing of Open Access Regulations, 2011 and hence, cannot be considered in the present proceedings, as it is not unique or restricted to only one utility. Shri Ulhas Chaudhary submitted that determination of CSS is not under the purview of the present Petition and should be addressed separately.

### ***RInfra-D's Response***

RInfra-D submitted that the primary reason for increase in power purchase costs of RInfra-D is the reduction of allocation of generation capacity by TPC-G. Till FY 2007-08, this capacity was available to RInfra-D to the extent of 762 MW, which was brought down to 500 MW by the Commission vide its Order dated June 4, 2008. While the issue was taken by RInfra-D right

upto the Apex Court, RInfra-D also simultaneously initiated the process of procurement of power through competitive bidding route for Medium-Term (upto FY 2014) and Long-Term period (thereafter, for 25 years). However, all the bidders quoted availability of power from April 2011 onwards only. At the same time, the prices quoted by the bidders were not in line with the market trends, which necessitated negotiations. RInfra-D is presently before the Commission for approval of the PPAs that it has signed with the bidders under the Medium-Term and Long-Term Power Procurement process. As all power to be procured through the competitive bidding process will commence in FY 2011-12, the shortfall in TPC-G allocation during FY 2008-09, FY 2009-10 and FY 2010-11 has had to be purchased by RInfra-D from short-term market. The prices of power in short-term market in later half of FY 2008-09 and FY 2009-10 were exorbitant due to shortage in the country, unprecedented rise in fuel prices, etc. Due to the cap on Fuel Adjustment Charges, a large portion of costs incurred on power purchase remained unrecovered. These costs could have been recovered through the tariffs of FY 2009-10 had the same not been stayed. The stay on tariffs was subsequently vacated by the Commission from September 2010 onwards, after the Report of the Investigative Agency held that there are no discrepancies in the affairs of RInfra-D.

RInfra-D submitted that a perusal of the above events will demonstrate that RInfra-D cannot be held responsible for the rise in its power purchase costs. RInfra-D has always procured power at the lowest possible price to meet the demand of its customers. However, events beyond its control forced RInfra-D to approach the short-term market for purchase of power in large quantities. As can be seen from above, reduction in allocation and subsequent purchase from short-term market could not have come at a worse time. The power had to be procured to meet 24x7 reliability of supply, but the prices were so high that it led to a huge pile up of costs. However, efforts by RInfra-D to tie-up economical power is expected to reflect in power purchase cost from FY 2011-12 onwards as RInfra-D has tied up competently priced power and for which RInfra-D is presently before the Commission, which would surely bring the costs down in future and allow the possibility of reduction in tariffs and cross-subsidies.

RInfra-D submitted that the objector's suggestions/remarks vis-a-vis levy of CSS only when demand goes below 3786 MU, are not understood, and therefore, RInfra-D cannot comment on the same.

RInfra-D submitted that the objector needs to be apprised of the fact that while cross-subsidy is a function of costs, it is also equally a function of consumer mix. If the mix is heavily tilted towards lower end residential consumers (as is the case in RInfra-D's area of supply), there will always be a requirement to subsidise them. This subsidy comes from HT and LT commercial and

industrial consumers. Hence, if there is large scale exodus of such higher end consumers, the available cross-subsidy will continuously reduce, leading to (i) increase in tariffs of left over commercial and industrial consumers and thus, increase cross-subsidy (which is restricted under the EA 2003) or (ii) increase the tariffs of lower end residential consumers and move them closer to the cost of supply, thereby reducing requirement of cross-subsidy. The former is not possible under the EA 2003 while the latter has very limited application due to affordability and paying capacity issues.

It is for the reasons as highlighted above that RInfra-D has sought levy of Cross-Subsidy Surcharge on the change-over consumers. It is RInfra-D's contention that change-over is nothing but a special case of Open Access and consequently the consumers opting for the same should pay CSS to the distribution licensee to compensate the licensee for the current level of cross-subsidy. Availability of CSS would ensure that tariffs of left-over small and marginal consumers do not rise to unaffordable levels.

RInfra-D submitted that the change-over consumers utilize the network of RInfra-D in order to receive power from TPC-D. This arrangement is envisaged pursuant to the Hon'ble Supreme Court's Order dated July 8, 2008, in Civil Appeal No. 2898 of 2006, wherein the Hon'ble Supreme Court held as under:

*“The concept of wheeling has been introduced in the 2003 Act to enable distribution licensees who are yet to instal their distribution line to supply electricity directly to retail consumers, **subject to payment of surcharge in addition to the charges for wheeling as the State Commission may determine.**” (Emphasis supplied)*

The Hon'ble Supreme Court has thus, categorically held that while one distribution licensee could use the network of another in order to supply power to retail consumers, the same can only be done on payment of wheeling charges and surcharge thereon. In order words, open access consumers/ change-over consumers who receive power from TPC-D on RInfra-D's network should be treated similarly and charges for use of network (i.e., wheeling charges) and cross-subsidy surcharge should be leviable.

Furthermore, RInfra-D has always maintained that usage of RInfra-D network by TPC-D to supply power to consumers is an act of open access and should be governed by Open Access

Regulations. If it is not open access, the same facility should be available to consumers in BEST area of supply as well. However, the Commission, while issuing its Order dated February 22, 2010 in Case Nos. 60, 81, 83, 84, 85 and 86 of 2009 did not allow the aggrieved consumer (Petitioner therein) to migrate to TPC-D using network of BEST. Instead, the Commission stated that TPC-D, being a distribution licensee, is enjoined upon by the EA 2003 to lay its distribution system in its area of supply and supply power to consumers. The contention of TPC that the proposal of RInfra-D to levy CSS and recover cross-subsidy from switch over consumers has no legal basis is incorrect. In fact, the Petition in Case No. 50 of 2009 has been filed by TPC under the Distribution Open Access Regulations of MERC.

Sub-section 3 of Section 42 refers to “*any licensee*” which necessarily means in the present context a distribution licensee such as TPC other than RInfra-D which is a distribution licensee who is wheeling TPC’s electricity to the open access consumers. The contention raised in paragraph 8 is misconceived and on an incorrect premise. The changed over consumers are open access consumers using RInfra-D network which is an admitted position. They are not using the network of TPC to avail supply and cannot be considered outside the scope of Section 42 of EA 2003.

RInfra-D submitted that competition is the mainstay of the EA 2003. The EA 2003 and the Policies framed thereunder strive to achieve competition in all aspects of the power supply value chain right from generation to retail supply. The EA 2003 has gone a step further from the previous legislations and brought competition to the doorstep of retail consumers, by providing them choice of supply. Such choice is available to be exercised either in the form of Open Access or by obtaining supply from other distribution licensees in the area of supply. It is clear from the scheme of the EA 2003 that Open Access is the easier alternative envisaged therein as it does not require laying of parallel distribution system, while still providing the consumer with a right to choose its supplier. For consumers interested in seeking supply from a person other than the distribution licensees in his area of supply through open access, the choice of supply is left open to the eligible consumer, and restricted to only the select few consumers who are made eligible by the SERC to exercise such choice. On the other hand, in case of multiple distribution licensees, the choice of supplier is limited to the distribution licensees operating in the area; the same can be exercised essentially by any and all consumers. The presently approved mechanism of change-over makes supply choice available to all consumers of RInfra-D/TPC-D, it is possible for consumers to exercise their choice almost immediately. However, it comes at a price of restricting the choice to only between the two licensees (and other licensees, if given a licence in future for the same area).



Essentially the change-over mechanism is a method of allowing Open Access to all consumers in a supply area through the presence of multiple distribution licensees. The freedom of choice lawfully granted to a consumer is not curtailed in case of change-over and is in fact enabled. However, the EA 2003 has been careful in allowing this freedom of choice to consumers by protecting the distribution licensee through cross-subsidy surcharge.

Cross-subsidy surcharge is a tool by which unfair competition and cherry picking of consumers is prevented. The whole competition in open access is clearly contingent on the alternative supplier's ability to bring in cheaper power such that even after levy of cross-subsidy surcharge (other costs being same, as existing licensee's assets are used), the end tariff is competitive vis-à-vis the tariff of the parent distribution licensee.

RInfra-D submitted that changeover mechanism is actually an enabler of open access and makes available the choice of supply to any and all consumers of a distribution licensee. As such, at least the essential ingredients of open access – CSS being one – must necessarily be applicable to the migrating consumers as competition cannot be promoted at the expense of consumers who necessarily require cross-subsidy support in order to maintain affordability of tariffs.

RInfra-D submitted that the data would show that a large number of subsidizing consumers have switched over to TPC thereby leaving a huge amount of cross-subsidy to be borne by only some subsidizing consumers of RInfra. These switched over consumers nonetheless are using RInfra-D wires to avail supply of TPC-D's power. There is and has been a disparity in tariff of different categories for various reasons not attributable to RInfra-D insofar as TPC's tariff to its consumers is concerned. The same has nothing to do with RInfra-D's planning of its power procurement at reasonable costs. In fact, the process of switching over of consumers by utilizing RInfra-D's network without appropriate mechanism of cross-subsidy, surcharge and recovery of past regulatory assets has resulted in denial of level playing field to RInfra-D coupled with stay of RInfra-D's tariff for FY 2009-10.

RInfra-D agrees that cross-subsidy is an element of tariff design and this is precisely the reason why the availability of cross-subsidy should be maintained by way of surcharge, in order to maintain the tariff design and not subject the low end consumers to unaffordable tariff shocks overnight. Even the EA 2003 and Tariff Policy recognize that cross-subsidies cannot be eliminated and can only be reduced gradually over a period of time. RInfra-D has no objection to reduction of cross-subsidies on the basis of some defined trajectory. RInfra-D only submits that until the tariff design includes inherent cross-subsidisation, the same should be made available to

the distribution licensee as otherwise it would result in tariff shock to the balance consumers of the distribution licensee, which is neither desirable nor envisaged in the Act.

RInfra-D submitted that it has proposed to charge cross-subsidy surcharge from migrating consumers as RInfra-D maintains that the situation of change-over is actually a special case of open access where open access has been permitted to all consumers of RInfra-D's area of supply in order to enable them to receive supply from the other distribution licensee in the area (which choice could also be expanded to distribution licensees other than TPC-D, if more licences are awarded in future, and the consumers are allowed to switch between licensees using the existing network).

RInfra-D submitted that if TPC-D's reasoning is accepted, it would hold true even for pure Open Access consumers, as according to TPC-D's submission, they shall also be "third parties" and would have severed all ties with the distribution licensee. By reverse logic, therefore, if it is not true in case of pure open access, it cannot be true in case of such changeover as well, which is also nothing but a special case of open access.

In the example given by TPC-D, all power purchase has been valued flat at Rs.7 per unit. Clearly, this is ill-conceived as power purchase gets avoided collectively through migration of all consumers based on the migrating consumers' consumption profile. As power costs are different in different hours of the day, the cost of avoidance is different across different hours. RInfra-D has, in its Petition, tried to capture this by determining the cost of power at peak and off-peak hours and the quantum avoided due to change-over and valued the same based on actual rates of purchase in different hours of the day, based on actual contracts.

RInfra-D submitted that the Hon'ble ATE has directed that the issue must be decided within a period of 120 days either from the date of admission of ARR Petition or the date of Hon'ble ATE's Judgment, whichever is earlier. RInfra-D submitted that the issues related to cross-subsidy surcharge and recovery of Regulatory Assets both ought to be decided by the Commission within a period of 120 days from the date of admission of ARR Petition (the same being February 28, 2011, which is earlier than the date of Hon'ble ATE Judgment). Whether the issue is decided along with the Order on RInfra-D's ARR/APR Petition or while finalizing the Regulations on Open Access (draft of which has already gone through public consultation) is up to the Commission.

RInfra-D submitted that MIAL itself has contended earlier that the issue of cross-subsidy is one of tariff design. If RInfra-D's area comprised mainly of high end, high paying capacity

consumers, the element of cross-subsidy between categories would have been minimal and majority of consumers would have been paying tariffs at or near cost of supply. The issue of cross-subsidy is prominent in RInfra-D's area mainly because the area comprises largely of lower end, low paying capacity consumers, which are required to be subsidized by other, higher end consumers. Clearly, therefore, the issue of cross-subsidy and its loss has arisen in RInfra-D's area simply because of migration of higher end consumers, who were providing this cross-subsidy to keep lower end tariffs affordable. It is not an issue of high power purchase cost as alleged by MIAL.

RInfra-D's submission in the present Petition is limited to seeking CSS from migrating consumers in order to bridge the cross-subsidy deficit, which cross-subsidy is essential to maintain affordability of tariffs for lower end consumers of RInfra-D. RInfra-D cannot comment on the cross-subsidy, if any, contributed by MIAL in TPC-D's tariff structure.

RInfra-D submitted that while direct subsidy may be a better way to support the poorer category of consumers, the same is not available to any distribution licensee in Mumbai. Inter-category cross-subsidisation is, therefore, the only way available to maintain affordability of tariffs in the areas of supply of Mumbai distribution licensees. While the EA 2003 and the Policies mandate gradual reduction of cross-subsidies, they also recognize that cross-subsidies, till such time they are reduced, must be charged from Open Access consumers, i.e., those that move away from the fold of the distribution licensee, where they were earlier providing such cross-subsidy. RInfra-D has earlier argued as to why change-over is nothing but a special case of Open Access and accordingly, RInfra-D maintains that its plea for CSS is valid and justified under the provisions of the Act.

RInfra-D submitted that it has proposed two formulae in the Petition for computation of CSS. The Objector is referring to the Avoided Cost formula. RInfra-D has, in this formula, adopted the Tariff Policy formula in spirit and modified the same to reflect the actual estimated avoidance of power (and cost) due to consumer migration. It is RInfra-D's contention that with such large scale reduction in demand, the reduction in power purchase cannot simply be reflected by valuing the same at 5% marginal cost. The reduction as anticipated on account of such migration should be computed using load curves, as how much power and at what times of day the same will get avoided will depend upon the consumption profile of the migrating consumers and the power purchase portfolio of the licensee. RInfra-D has, therefore, tried to reach the most realistic number of avoided power purchase through these modifications, as that, in the opinion of RInfra-D, truly reflects the actual loss of cross-subsidy. RInfra-D submitted that it has presented both the methods in the Petition. It is the prerogative of the Commission to approve levy of CSS in the

manner it deems fit.

Furthermore, without prejudice to RInfra-D's submissions that the issue is required to be addressed during finalization of ARR as per the Hon'ble ATE Order in Appeal No.200 of 2010, the Commission has itself submitted before the Hon'ble ATE that the issue of cross-subsidy surcharge for change-over consumers as pleaded by RInfra-D would be decided while framing Open Access Regulations. Hence, if TPC-D now contends that the present mechanism of change-over is not Open Access, it should not wait for Open Access Regulations to determine the surcharge. On the contrary, TPC-D itself, in these objections contends that, based on the Hon'ble ATE's Judgment in Appeal No. 200 of 2010, the issue of surcharge should be decided after OA Regulations are framed and ironically, on the other hand, states that the mechanism of change-over is not open access. These submissions are contradictory and liable to be rejected at the outset.

### **Commission's Ruling**

As regards the issue of levy of cross-subsidy surcharge on consumers migrating to another distribution licensee in the same area of supply, the Commission has given its ruling in the matter in Section 6.4 of this Order.

## **2.25 CAPITAL EXPENDITURE FOR CHANGE-OVER CONSUMERS**

Shri Vinayak Joshi, Shri K. R. Nevrekar and others submitted that in Case No 113 of 2008, TPC had requested to allow capital expenditure for supplying electricity to change-over consumers, however, the Commission did not approve the same. This means the changeover consumers are permanently connected to RInfra-D and RInfra-D will keep making unjustifiable demands from these consumers for its inefficiency in operations. This amounts to unfair treatment to the change over consumers, thereby defeating the whole purpose of concept of competition as envisaged in NEP and Tariff Policy.

### ***RInfra-D's Response***

RInfra-D submitted that, as regards laying of network by TPC, it is RInfra-D's submission that the process of duplication of network infrastructure is economically wasteful and is detrimental to the long-term interests of the consumers. The new parallel network, by simple economic logic, will entail higher marginal capex (i.e., capex required to serve one unit of electricity) and will therefore, be more expensive. At the same time, the existing network would get stranded leading to rise in its per unit cost as well. Neither of the two networks will therefore, remain

economically efficient over time. Moreover, the existing network offers advantages in terms of economies of scale and flexibility to the network owner to offer more efficient solutions for network extension (due to widespread presence of existing network), which are lower cost. These benefits will be compromised if networks are allowed to be duplicated. Under Section 42(1) of the EA 2003, a distribution licensee is obligated to have a co-ordinated, efficient and economical development of the network. Similar obligation of the transmission licensee is taken care by the functioning of STU who ensures that the development of transmission system is co-ordinated, efficient and economical. While there is no such nodal agency in distribution however for ensuring the same, Commission may consider constituting a nodal agency in line with GCC/MSPC.

### **Commission's Ruling**

Section 2(17) of the EA 2003 defines a "distribution licensee" as a licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply, while the sixth proviso to Section 14 of the EA 2003 states that "*...the Appropriate Commission may grant a license to two or more persons for distribution of electricity through their own distribution system within the same area...*" Hence, each licensee has to have its own distribution system for supplying electricity to consumers in its area of supply. As a consequence, TPC also will have to set up its own distribution network in its area of supply, and the utilisation of the existing distribution network of RInfra-D for supplying to change-over consumers is only an interim solution, till such time TPC sets up its own network.

## **2.26 IMPACT OF ATE JUDGMENT**

Sandeep Ohri, Shri N. Ponrathnam and others submitted that RInfra-D has appealed against most of the Tariff Orders issued by the Commission and has mostly received favourable Judgments in these appeals. He further submitted that there are no consumers and objectors present before the ATE, hence, the Commission may please consider the views and objections of the consumers, and provide a mechanism for representation before the ATE.

### ***RInfra-D's Response***

RInfra-D submitted that it is following the procedure prescribed under the law for preferring appeals before the Hon'ble Supreme Court and the Hon'ble ATE.

### **Commission's Ruling**

The Commission has no comments on this issue.

## **2.27 SUPPLY MARGIN**

TPC-D submitted that the present MERC Tariff Regulations permit recovery of costs and return on equity on the equity portion of the capitalisation. Serving the changeover consumers does not involve any capitalisation of assets (except for a small quantum on meters) and hence, does not entitle TPC-D to any return. TPC-D had in the past requested the Commission to consider payment of Supply Margin for sales to changeover consumers; as such consumers are being supplied without any additional investment on the part of the distribution licensee who is supplying the power. There is no provision for supply margin under the MERC (Multi Year Tariff) Regulations, 2011, and hence, there is no profit/ return/ incentive earned by TPC-D on account of additional sale of electricity to changeover consumers.

TPC-D requested the Commission to consider payment of Supply Margin for change over sales in FY 2010-11. TPC-D further suggested that in order to determine a fair supply margin, it may be appropriate to consider the RoE of TPC-D as a proxy for Margin and divide the same by Sales connected to TPC-D network. TPC-D submitted that the supply margin would work out to Rs. 0.13/ kWh on the basis of RoE proposed for FY 2010-11.

### ***RInfra-D's Response***

RInfra-D submitted that it has proposed single wires network from the point of view of economics. It is a settled principle in economics that parallel infrastructure, particularly where large scale capital investment is required, is only justified if the cost of the two networks put together is lower than the cost of a single network, ceteris paribus. This is called the principle of sub-additive-ness of cost. Because this principle never holds true in case of electricity transmission or distribution infrastructure, there are no examples across the world of more than one distribution infrastructure being present in the same area of supply. Economics does not justify paralleling of infrastructure, mainly because it compromises economies of scale and technical efficiency of the network. The cost of erecting new assets is always more than the cost of existing depreciated assets and consequently the marginal capex required to serve one unit of electricity on a parallel, newly erected network is much higher than the embedded cost of existing network. If this is exploded over-time, i.e., if more paralleling is allowed to continue, the newer network becomes more and more uneconomical as compared to the existing network. However, the existing network, being stranded, also becomes uneconomical as the same cost has to now spread over much lesser units of electricity. Over-time, therefore, both networks will become uneconomical and technically inefficient. In its submissions on the Commission's draft Paper on Parallel Licensee Framework, RInfra-D has elaborated on the above stated principle and argued in detail on the issues brought out above. The submissions made herein are without

prejudice to one another.

### **Commission's Ruling**

The Commission had considered this issue at the time of finalising the MERC MYT Regulations, 2011, and had not introduced any 'Supply Margin' as sought by TPC. The Commission will consider this issue at the time of finalising the Regulations on Parallel Licensee Framework.

### **2.28 INCREASE IN TARIFF**

Jankalyan Developers and AHAR submitted that the tariff decided and finalised by the Commission should be treated as Maximum Retail Price (MRP) for each unit of electricity sold and licensees should be given an option of supplying power at lesser rates. The Licence may charge the consumers upto the maximum price and thus, attain competitive advantage and take advantage of open access policy.

Jankalyan Developers and AHAR submitted that there are many Cases pending at Supreme Court and ATE and the present Petition cannot be taken ahead without knowing the outcome of those pending appeals. These pending appeals should be taken up expeditiously so that the tariff structure for the future can be determined accordingly.

Shri Deepak N. Israni submitted that 75% of the ARR is spent in procuring power from different sources. The cost of power purchase has gone down by 15.17% in FY 2009-10 compared to FY 2008-09 and is projected to go down by 9.30% further in FY 2010-11 as compared to FY 2009-10. The quantum of expensive power has reduced due to the changeover of TPC consumers. The losses have been brought under control due to decline in expensive power purchase. He further submitted that the balance 25% of expenses can be controlled to some extent to bring down the tariffs by at least 5%. He thus, requested the Commission to reduce the tariffs of existing RInfra-D customers, and added that keeping in mind the growing inflation rates, it is expected that the Commission will take some stringent steps to keep the prevailing electricity tariffs under control and bring down the existing tariffs by some extent.

Shri P.N.Sridharan, a representative of Mumbai Citizens' Welfare Forum and Shri Kamal Shah submitted that electricity being an essential item like water, any intention to take advantage of it for exploiting the public to earn exorbitant profit must be checked.

Shri N. Ponrathnam and Shri Jude G. Tandon submitted that the Commission cannot determine tariff for FY 2010-11 after the completion of the financial year.

### ***RInfra-D's Response***

RInfra-D submitted that retail tariff rates are the rate to be charged to the consumers. The proposal of the Objector on introducing MRP may not be viable for the licensees, as any discount to the ceiling tariff would have to be offered on non-discriminatory to all consumers in the tariff category. Also, till such time cross-subsidy exists in the tariff rates, discount/ rebate to any particular category would only distort the consumer mix and cross-subsidy.

RInfra-D submitted that it has always endeavoured that the pending legal issues are resolved at the earliest. However, it is prerogative of the Hon'ble Supreme Court as to when the matters will come up for hearing.

RInfra-D submitted that although the power purchase costs have come down reasonably, however, due to stay on tariff hike during FY 2009-10 and FY 2010-11, loss of cross subsidy due to changeover of subsidizing consumers to TPC, allowance of additional costs by ATE and additional revenue gap for FY 2010-11, there is unrecovered cost. Thus, RInfra-D has not proposed tariff reduction for FY 2010-11.

RInfra-D submitted that the present petition is filed for the purpose of truing up of FY 2008-09 and FY 2009-10, in addition to determination of ARR for FY 2010-11.

### **Commission's Ruling**

The EA 2003 states "*in case of distribution of electricity in the same area by two or more distribution licensees, the Appropriate Commission may, for promoting competition among distribution licensees, fix only maximum ceiling of tariff for retail sale of electricity*". However, there are several issues that would need to be addressed before fixing maximum ceiling tariffs in the licence area of RInfra-D, where TPC-D also has a distribution licence, and the same would be addressed at the time of finalising the Regulations on Parallel Licensee Framework.

As regards the submission on pending cases before Hon'ble ATE and Hon'ble Supreme Court, there would always be pending cases, and the processing of any Petition cannot be held up, merely because of pending cases, unless there is a specific stay by any higher Court on the same. The Commission is undertaking the current exercise in accordance with MERC Tariff Regulations, 2005. In this Order, the Commission has not determined the tariff for FY 2010-11, as the year is over.



## **2.29 CARRYING COST ON CUMULATIVE REVENUE GAP**

Shri Vinayak Joshi and Shri K. R. Nevrekar submitted that the cumulative revenue gap of Rs. 2376 Crore is 44% of the projected revenue of Rs. 5342 Crore for FY 2010-11. Looking at the cumulative gap, it is certain that the operations of RInfra-D have not remained financially viable due to consistent failure to procure cheap power. They requested to consider this aspect while renewing RInfra-D's licence, which is expiring in August 2011. The objectors further submitted that the Commission should not allow carrying cost on cumulative revenue gap as it amounts to rewarding the inefficiency of RInfra-D.

### ***RInfra-D's Response***

RInfra-D submitted that its Petition in the instant case clearly illustrates the components of the Regulatory Asset/ Past Revenue Gap. It is made up entirely of costs, which were earlier deferred for recovery by the Commission, allowed later by ATE Rulings and revenue gap has been created only because costs could not be recovered from consumers due to stay on retail tariffs. The Commission and ATE allow costs to the distribution licensee after going through necessary prudence checks, which itself means that the allowed costs cannot be considered inefficient. Further, the accumulated gap in FY 2009-10 is simply because approved costs could not be recovered due to tariff stay. None of the components of the Regulatory Asset / Revenue Gap can therefore, be termed as having arisen due to inefficiency of the licensee. As regards recovery of these revenue gaps, as the mechanism of recovery is not proposed in the instant Petition, RInfra-D would not like to comment on the issue of recovery or carrying cost thereon, if any.

### **Commission's Ruling**

The Commission has not included carrying cost, as RInfra-D is not proposing to recover these costs in FY 2010-11.

## **2.30 RE-BRANDING**

Shri Rakshpal Abrol and Shri Sandeep Ohri submitted that the Petition has been filed by M/s Reliance Infrastructure Limited, with its Registered Office at a Navi Mumbai address location. The Affidavit has been signed by Mr. Ramesh Shenoy, Company Secretary, with his Office address as "Reliance Energy Centre, Santa Cruz East". The Petitioner should clarify the status of the Santa Cruz East office premises, since this is obviously no longer the Registered Office of RInfra. He further submitted that no Office Number, Block Number, Floor Number, Gala Number or Unit Number or any other such identification has been provided. He asked RInfra-D to provide details of which other companies have their Offices (whether as Registered Office or

not) or activities being carried out in this building at Santa Cruz East and provide proof in the form of Title Deed, Rent Receipt, etc.

### ***RInfra-D's Response***

RInfra-D submitted that the list of RInfra-D's assets has already been submitted to the Commission with copy to all Consumer Representatives in Case No. 40 of 2009. RInfra-D will continue to use these assets in accordance with the Regulations.

RInfra-D submitted that in the revised Petition submitted to the Commission on December 09, 2010, RInfra-D has mentioned its new Registered Office address in the Affidavit to the Petition. The change in address of Registered Office has been communicated to the Commission vide RInfra-D's letter dated November 24, 2010.

### **Commission's Ruling**

The Commission is of the view that the objections raised by the stakeholders are not really relevant for the present exercise of determination of ARR for FY 2010-11.

## **2.31 EXPIRY OF DISTRIBUTION LICENSEE**

Shri N. Ponrathnam submitted that RInfra-D's distribution license is expiring on August 15, 2011 and hence, tariff cannot be determined for the financial year.

### ***RInfra-D's response***

RInfra-D submitted that it has already expressed its interest in the distribution license to the Commission during the proceedings before the Commission in Case No. 78 of 2010.

### **Commission's Ruling**

As stated earlier, the Commission has not determined the tariff for FY 2010-11, as the year is already over.

## **2.32 DIRECTION FOR COMPLIANCE OF REGULATIONS**

Shri N. Ponrathnam submitted that consumers have executed lease agreement with one rupee annual lease rent. There is no fresh Agreement made till date as required by Regulation 5.5 of Maharashtra Electricity Regulatory Commission (Electricity Supply Code and Other Conditions of Supply) Regulations, 2005 dated January 20, 2005. The consumer's property can be leased to any of the distribution licensees for setting up the network, and the monopoly of wires will also

reduce, giving fresh air to competition.

### ***RInfra-D's Response***

RInfra-D submitted that the issue raised is not related to the above-mentioned ARR Petition of RInfra-D, and is hence, not being responded to in these proceedings.

### **Commission's Ruling**

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

## **2.33 STATUS OF PROPOSED DE-MERGER SCHEME**

Shri Sandeep Ohri submitted that the Petition states that REL is joined as a Petitioner in the present Petition, however, on scrutiny it is found that the Petition has been filed/signed only by RInfra. The objector asked RInfra-D to clarify whether REL is joined as a Petitioner in this Petition. He further asked about the details and status of the pending approval required for the de-merger Scheme.

Shri N. Ponrathnam and Shri Jude G. Tandon submitted that the distribution licence supposed to be assigned to Reliance Energy Limited is not deemed to be approved by the Commission as the required transfer of assets and retention ownership and operational control by Reliance Energy is not done even after elapse of a year from the Commission's Order in this regard.

### ***RInfra-D's Response***

RInfra-D confirmed that RInfra is the only Petitioner. RInfra-D submitted that the proposed de-merger Scheme of RInfra has been withdrawn and the Hon'ble High Court by its Judgment dated March 25, 2011 has allowed the withdrawal of the said de-merger Scheme. The Hon'ble High Court has inter alia held that -

*"...no part of the scheme including the consents given by any party will become effective, as it is a part of a composite scheme".*

### **Commission's Ruling**

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

### **2.34 LEGAL ENTITY**

Shri Sandeep Ohri submitted that RInfra and RInfra-D are being treated as two separate entities by the Commission, however, the reality is that RInfra-D is not a separate legal entity. Even the recognition granted under the MERC (Specific Conditions of Distribution License) Regulations 2008 also refer to a legal entity known as RInfra.

#### ***RInfra-D's Response***

RInfra-D confirmed that RInfra is the legal entity. The use of word "RInfra-D" is in line with nomenclature used by the Commission.

#### **Commission's Ruling**

Reliance Infrastructure Ltd has made the present application for determination of the truing up requirement for FY 2008-09, provisional truing up for FY 2009-10, and determination of ARR for FY 2010-11, for its electricity distribution division. However, as a separate legal entity, it is Reliance Infrastructure Ltd., which is responsible for electricity distribution in its area of supply. It is Reliance Infrastructure Ltd, which will implement the present order. The concern that Reliance Infrastructure Ltd, and the electricity distribution division of Reliance Infrastructure Ltd., are being treated as separate legal entities is not sustainable. The Commission is also of the view that the objection or suggestion raised by Shri Sandeep Ohri, is neither explained fully nor does it appear to be relevant for consideration.

### **2.35 DISTRIBUTION LICENCE**

Shri N. Ponrathnam, Shri Rakshpal Abrol and Shri Jude G. Tandon submitted that the distribution licence of Bombay Suburban Electric Company Limited has not been assigned to Reliance Energy Limited or to Reliance Infrastructure Limited. He added that the Commission has given reply under Right to Information Act by Letter no MERC/RTI CASE25/2008/1291 dated June 24, 2008, that Reliance Infrastructure Ltd. has not been authorized to distribute electricity. Shri N. Ponrathnam added that the recognition of REL by MERC Specific Conditions of License Regulations is illegal as the change of name is not applied for by the Petitioner in the relevant proceeding and has been incorporated by the Commission.

#### ***RInfra-D's Response***

RInfra-D submitted that the same issue raised earlier by the Objector has already been settled by the Commission's Order dated March 15, 2010 in Case No. 40 of 2009.

### **Commission's Ruling**

The Commission agrees that this issue was raised earlier by the Objector and has already been addressed in the Commission's Order dated March 15, 2010 in Case No. 40 of 2009. It needs neither to be raised again nor is required to be addressed time and again.

### **2.36 CAPEX**

Shri Rakshpal Abrol submitted that RInfra-D should provide data on replacement of LT and HT distribution cables under the capex approval of Rs. 2000 Crore. He also asked RInfra-D to submit the LT and HT new connections provided as against the capex estimated in the APR and ARR Petition, as well as the data on old mechanical meters replaced with digital meters to bring efficiency.

#### ***RInfra-D's Response***

RInfra-D submitted that it provides the status of all its Capex Schemes in the APR model. RInfra-D updates the Commission on completion of various schemes from time to time. Further, RInfra-D has already submitted a detailed Cost-Benefit Report for its various schemes to the Commission.

RInfra-D submitted that the new connections for HT as well as LT, for each year, are included in number of consumers provided in Form 13 of RInfra-D's APR Petition and hence, increase in number of consumers is available in the Form 13 of the Petition. Similar data is provided in the APR Petitions submitted in the past.

RInfra-D submitted the status of electromechanical meters till November 2010 and its replacement schedule.

### **Commission's Ruling**

The Commission obtains the relevant data regarding capex and capitalisation from the distribution licensees, and only the approved capex schemes have been considered in this Order.

### **2.37 FUTURE TARIFF**

Shri N. Ponrathnam and Shri Jude G. Tandon submitted that the Commission should determine tariff for FY 2011-12 before March 31, 2011, and the Commission should not support licensees who are adamant on violating Section 62(4) of the EA 2003.

### ***RInfra-D's Response***

RInfra-D submitted that it has not sought any change in the FY 2010-11 tariff after the stay on tariff was lifted pursuant to Order dated September 09, 2010 in Case No. 121 of 2008, hence, there is no violation of section 62(4). Further, the objectors' concern on FY 2011-12 tariff is outside the purview of the present Petition.

### **Commission's Ruling**

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

## **2.38 APPLICABLE TARIFF REGULATIONS**

Shri N. Ponrathnam submitted that the MYT Regulations have been framed as per Section 61(f) of Electricity Act, 2003, therefore, this Petition cannot be entertained.

### ***RInfra-D's Response***

RInfra-D submitted that the present Petition has been filed for the purpose of truing up of FY 2008-09 and FY 2009-10 in addition to determination of ARR for FY 2010-11 in compliance with MERC Letter No. MERC/MYT-Tariff Regulations/2714 order dated December 01, 2009.

### **Commission's Ruling**

RInfra-D has filed the current Petition in accordance with Maharashtra Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2005.

## **2.39 STATUS OF APPEALS**

Shri Sandeep Ohri submitted that the Petitioner has filed a statutory appeal against the Commission's Tariff Order dated June 15, 2009 and the impact of the same has not been considered in the present Petition.

### ***RInfra-D's Response***

RInfra-D submitted that the impact can be ascertained only after the appeal is decided by the Hon'ble ATE.

### **Commission's Ruling**

The Commission is of the view that the impact of the pending Appeals at various levels can be

ascertained only after the appeal is decided by the respective Court/ATE.

## **2.40 CHOICE OF NETWORK PROVIDER**

Shri N. Ponrathnam submitted that consumers should have the option of selecting their network provider as the total substation is constructed and provided by the consumers to the Petitioner and there is no stranded asset.

### ***RInfra-D's Response***

RInfra-D submitted that the process of duplication of network infrastructure is economically wasteful and is detrimental to the long-term interests of the consumers. The new parallel network, by simple economic logic, will entail higher marginal capex (i.e., capex required to serve one unit of electricity) and will therefore, be more expensive. At the same time, the existing network would get stranded leading to rise in its per unit cost as well. Neither of the two networks will therefore, remain economically efficient over time. Moreover, the existing network offers advantages in terms of economies of scale and flexibility to the network owner to offer more efficient solutions for network extension (due to widespread presence of existing network), which are lower cost. These benefits will be compromised if networks are allowed to be duplicated. Under Section 42(1) of the Act, a distribution licensee is obligated to have a coordinated, efficient and economical development of the network. Similar obligation of the transmission licensee is taken care by the functioning of STU who ensures that the development of transmission system is coordinated, efficient and economical. While there is no such nodal agency in distribution however for ensuring the same, the Commission may consider constituting a nodal agency in line with GCC/MSPC.

### **Commission's Ruling**

Section 2(17) of the EA 2003 defines a "distribution licensee" as a licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply, while the sixth proviso to Section 14 of the EA 2003 states that "*...the Appropriate Commission may grant a license to two or more persons for distribution of electricity through their own distribution system within the same area...*" Hence, each licensee has to have its own distribution system for supplying electricity to consumers in its area of supply. As a consequence, TPC also will have to set up its own distribution network in its area of supply, and the utilisation of the existing distribution network of RInfra-D for supplying to change-over consumers is only an interim solution, till such time TPC sets up its own network.

### **3 IMPACT OF JUDGEMENT OF APPELLATE TRIBUNAL FOR ELECTRICITY (ATE) AND PREVIOUS YEARS' TRUING UP**

As discussed in Section 1, the Commission issued the Order on the APR Petition of REL-D for FY 2007-08 and Tariff Determination of FY 2008-09 (Case No. 66 of 2007) on June 4, 2008 wherein the Commission had undertaken the truing up of the expenditure for FY 2006-07. REL-D appealed (Appeal No.117 of 2008) against the Commission's APR Order, before the ATE. The ATE issued its Judgment on RInfra-D's above-said Appeal on August 28, 2009. RInfra-D submitted that the ATE has allowed RInfra-D's appeal on the following issues and accordingly, it is entitled to recover certain amount of expenditure disallowed by the Commission in its Order dated June 4, 2008. In addition, the Judgments of the ATE on TPC's Appeal Nos. 137 of 2008, 138 of 2008 and 139 of 2008 also affect RInfra-D and consequently certain impact in terms thereof are required to be included in the petition.

RInfra-D further submitted that on account of developments such its appeals being allowed by Hon'ble ATE and claim of previously deferred asset capitalization, there are certain additional allowances pertaining to FY 2006-07 and FY 2007-08, for which period, final truing-up has already been done by the Commission. RInfra-D has claimed these additional expenses separately.

#### **3.1 NON-DEDUCTION OF ONE MONTH EQUIVALENT COST OF POWER PURCHASE IN COMPUTATION OF WORKING CAPITAL FOR DISTRIBUTION BUSINESS**

On the issue of interest on working capital for FY 2007-08, the Commission in its above said Order dated June 15, 2009, stipulated as follows:

*"The Commission has estimated the normative working capital interest for FY 2007-08 in accordance with the MERC Tariff Regulations and based on expenses approved in this Order after truing up, considering both supply business as well as wires business. As regards RInfra-D's contention that the cost of power purchase from RInfra-G should not be included while computing the working capital requirement of RInfra-D, it is clarified that the computation of normative working capital requirement is being done in accordance with the MERC Tariff Regulations, which requires that the entire power purchase cost be included while computing the normative working capital requirement, without excluding for purchase from own generating sources. RInfra-D is effectively seeking amendment to the MERC Tariff Regulations through this request made in the*



*APR Petition. In case RInfra-D desires to seek any amendment to the MERC Tariff Regulations in this regard, RInfra-D may approach the Commission separately for the same, under appropriate provisions of law.”*

The Hon’ble ATE, in its Judgment in Appeal No. 117 of 2008, ruled as follows:

*“It has also been contended by the appellant that the Commission has considered that the generation company will not extend credit facility to the distribution licensee. This has been inferred by the appellant because, in computation of Working Capital requirement for the generator, two months receivables have not been considered. If it be so, it is only logical that the computation of Working Capital requirement for the distribution licensee should not assume one month credit facility from the generating company. In view of this we allow the appeal in respect of issue (b) and direct the Commission to compute the Working Capital by adding cost of one month’s power purchase as per our decision if this same approach has not been already followed by it.”*

In view of the above Judgment of ATE, RInfra-D submitted that one month equivalent power purchase cost from DTSPS should be added to the Commission’s approved working capital computation for FY 2006-07 and FY 2007-08, respectively. RInfra-D submitted that as the values for FY 2006-07 and FY 2007-08 have already been approved by the Commission in the final truing up of those years, the values need to be changed in view of the said ATE Judgment. RInfra-D submitted that the revised values of normative working capital subsequent to the ATE Judgment for FY 2006-07 and FY 2007-08 shall be Rs 177.02 Crore and Rs 285.87 Crore, respectively, after inclusion of one month equivalent power purchase cost from DTSPS for FY 2006-07 and FY 2007-08, respectively. RInfra-D submitted that as the ATE ruling addresses an issue of principle about the methodology to compute working capital for a distribution licensee, the same principle has been adopted by RInfra-D to compute working capital requirement for FY 2008-09 and beyond in this Petition.

In view of the ATE Judgment, the Commission has considered one month equivalent power purchase cost from DTSPS for computation of working capital for FY 2006-07 and FY 2007-08. The MERC MYT Regulations, 2011 have taken this principle into account and provisions have been made accordingly to reflect this principle. Based on the ATE Judgment and on the basis of submissions made by RInfra-D, the Commission has accepted the computation of working capital for FY 2006-07 and FY 2007-08, and the revised interest on working capital for FY 2006-07 and FY 2007-08 amounts to Rs. 19.03 Crore and Rs. 32.86 Crore, respectively.

The computation of additional interest of working capital approved by the Commission for FY 2006-07 and FY 2007-08 is summarised in the table below:

<b>Particulars</b>	<b>FY 2006-07</b>	<b>FY 2007-08</b>
Annual O &M Expenses	423.66	499.81
Sum of the Book value of stores	40.39	36.65
Annual Revenue	2,943.01	4,116.67
Security Deposits	233.48	249.32
Annual Cost of Power	2,252.22	3,219.54
PP Cost for DTSP	828.16	870.44
Working Capital Requirement	177.02	285.74
Interest Rate	10.75%	11.50%
Interest on working capital as per ATE Judgment	19.03	32.86
Interest on Working Capital Approved	11.42	24.52
Additional Entitlement as per ATE Judgment	<b>5.08</b>	<b>5.56</b>

### **3.2 INTEREST ON WORKING CAPITAL MET THROUGH INTERNAL ACCRUALS**

On the issue of interest on working capital met through internal accruals for FY 2007-08, the Commission in its above said Order dated June 15, 2009, stipulated as follows:

*“The Commission has computed the sharing of gains/losses on the difference between normative working capital interest and the actual working capital interest incurred, which in this case is zero, since this is a controllable parameter. The ATE has issued its Judgment on similar Appeals filed by RInfra-G and RInfra-T recently. The ratio of these Judgments and the issues related to sharing of gains and losses on this account, have been elaborated in Section 3.14 of this Order, while computing the sharing of gains and losses due to controllable factors. It is clarified that the normative working capital interest is not being disallowed, as interpreted by RInfra-D. Only the efficiency gains due to the fact that actual working capital loans have not been utilised, and RInfra-D has managed to save on this interest through its operational efficiency, have been shared with the consumers in accordance with the MERC Tariff Regulations.”*

The ATE, in its Judgment in Appeal No. 117 of 2008, ruled as following:

*“In Appeal No.111/08, in the matter of Reliance Infrastructure v/s MERC and Ors., this Tribunal has dealt the same issue of full admissibility of the normative interest on Working Capital when the Working Capital has been deployed from the internal accruals. Our decision is set out in the following paras of our judgment dated May 28, 2008 in Appeal No. 111 of 2008.*

*“ 7) The Commission observed that in actual fact no amount has been paid towards interest. Therefore, the entire interest on Working Capital granted as pass through in tariff has been treated as efficiency gain. It is true that internal funds also deserve interest in as much as the internal fund when employed as Working Capital loses the interest it could have earned by investment elsewhere. Further the licensee can never have any funds which has no cost. The internal accruals are not like some reserve which does not carry any cost. Internal accruals could have been inter corporate deposits, as suggested on behalf of the appellant. In that case the same would also carry the cost of interest. **When the Commission observed that the REL had actually not incurred any expenditure towards interest on Working Capital it should have also considered if the internal accruals had to bear some costs themselves. The Commission could have looked into the source of such internal accruals or funds could be less or more than the normative interest. In arriving at whether there was a gain or loss the Commission was required to take the total picture into consideration which the Commission has not done.** It cannot be said that simply because internal accruals were used and there was no outflow of funds by way of interest on Working Capital and hence the entire interest on working capital was gain which could be shared as per Regulation No. 19. Accordingly, the claim of the appellant that it has wrongly been made to share the interest on Working Capital as per Regulation 19 has merit.*

*b): The interest on Working Capital, for the year in question, shall not be treated as efficiency gain.*

*In view of our earlier decision on the same issue we allow the appeal in this view of the matter and hold that the entire interest on normative interest rate basis is payable to the appellant.”(Emphasis added)*

RInfra-D submitted all capital invested in the business has attached cost, which reflects the legitimate expectation of the Company’s shareholders, as the capital not used for working capital funding could have been deployed elsewhere to earn market based return. Hence, the Commission needs to re-compute the actual interest on working capital by considering SBI PLR. Accordingly, the interest rate on working capital should be allowed on normative basis, in the same manner as is allowed on capital expenditure, without looking into the source of funding, as the same is also done through internal accruals.

RInfra-D submitted that the components of working capital requirement are specified in the Tariff Regulations, and only the values need to be replaced with actual values, to determine the

'actual' quantum of working capital required by RInfra-D, which itself is the actual funding required to meet working capital requirement and the same should then be applied the normative interest rate to arrive at the actual interest on working capital and the same should be permitted to the licensee.

RInfra-D submitted that the Commission, in its Order of June 4, 2008, computed normative working capital interest for RInfra-D as Rs. 11.42 Crore. Out of this amount, an amount of Rs. 3.81 Crore was considered as the 1/3rd portion of efficiency gains to be shared with consumers, reducing the net entitlement of RInfra-D to Rs. 7.61 Crore. Similarly, in FY 2007-08, the Commission permitted Rs. 16.35 Crore as interest on working capital, after sharing Rs. 8.17 Crore with consumers.

RInfra-D submitted that according to the ATE Judgments, the normative working capital amounts for FY 2006-07 and FY 2007-08 are required to be re-determined and interest rate applied on these reworked amounts. The revised interest on working capital for RInfra-D for FY 2006-07 and FY 2007-08 works out to Rs.19.03 Crore and Rs. 32.87 Crore, respectively. This entire amount is allowable to RInfra-D without any sharing. As the Commission has already approved Rs. 7.61 Crore and Rs. 16.35 Crore for FY 2006-07 and FY 2007-08, respectively, the net impact after netting off these approved amounts would be Rs. 11.42 Crore and Rs. 16.52 Crore for FY 2006-07 and FY 2007-08, respectively.

**Table: ATE Impact- Interest on working capital as submitted by RInfra-D (Rs Crore)**

S.No.	Particulars	FY 2006-07	FY 2007-08
1	Annual O &M Expenses	423.66	499.81
2	Sum of the Book value of stores	40.39	36.65
3	Annual Revenue	2,943.01	4,116.67
4	Security Deposits	233.48	249.32
5	Annual Cost of Power	2,252.22	3,217.98
6	PP Cost for DTSPS	828.16	870.44
7	Working Capital Requirement	177.02	285.87
8	Interest Rate	10.75%	11.50%
9	Interest on working capital as per ATE judgment	19.03	32.87
10	Approved by Commission	11.42	24.52
11	Efficiency gains passed through to consumers	3.81	8.17
12	Net Entitlement considered by MERC	7.61	16.35
13	Additional Entitlement as per ATE judgment	11.42	16.52

In its Judgment, while ruling on the matter, the ATE observed that the Commission should have assessed whether the internal accruals had to bear some costs themselves, and that the Commission could have looked into the source of such internal accruals or funds, and the cost of these funds could be higher or lower than the normative interest. The ATE has observed that the Commission was required to take the total picture into consideration while arriving at whether there was an efficiency gain or loss.

Accordingly, for FY 2006-07, FY 2007-08, FY 2008-09 and FY 2009-10, the Commission asked RInfra-D to provide clarity regarding whether the working capital requirement has been met from the cash flows of RInfra-D and/or cash flows from any other business. Further, RInfra was also asked to submit the cash flow statement indicating as to how the working capital requirement has been met for RInfra-D business. In addition, the source and cost of such funds with appropriate justification was sought from RInfra-D.

In response to the above queries raised by the Commission, RInfra-D only submitted that the entitlement as sought in respect of Interest on Working Capital may be allowed in view of the various Judgments made by ATE in this regard and quoted few extracts of the ATE Judgments in Appeal No. 111 of 2008 (filed by RInfra-G), Appeal No. 115 of 2008 (filed by RInfra-T) and Appeal No. 117 of 2008 (filed by RInfra-D). However, no information or justification as sought by the Commission was submitted by RInfra-D.

The Commission is of the view that by implication, RInfra-D has managed to meet its working capital requirements by its own operational efficiency, and has minimised the working capital requirement itself, and not actually relied on any funds to meet its working capital requirement. Hence, the Commission has allowed the entire working capital interest on normative basis in accordance with the MERC Tariff Regulations. Further, as per Regulation 17.6.2 (d) of the MERC (Terms and Conditions of Tariff) Regulations, 2005, variation in working capital requirement is a controllable factor, and hence, the Commission rules that the entire normative working capital interest has to be considered as an efficiency gain, since RInfra-D has not submitted any documentary evidence for the actual working capital interest incurred, and the sharing of gains has to be computed in accordance with Regulation 19.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005.

As regards RInfra-D's submission that the components of working capital requirement are specified in the Tariff Regulations, and only the values need to be replaced with actual values, to determine the 'actual' quantum of working capital required by RInfra-D, which itself is the actual funding required to meet working capital requirement, effectively means that the efficiency gain should be computed as the difference between the 'normative' working capital interest and 'actual normative' working capital interest. In other words, RInfra-D's submission is that the

Commission should calculate 'normative' working capital requirement based on 'actual' cost components, and then compute the efficiency gain as the difference between the interest on 'normative' normative working capital interest and 'actual' normative working capital interest. If RInfra-D's submissions in this regard were to be accepted, all other operational efficiency parameters should be considered that way, and no sharing of efficiency gain, computed as the difference between normative levels and actual levels, should be done. However, for all other operational parameters, such as Station Heat Rate, auxiliary consumption, Operation and Maintenance expenses, etc., sharing of efficiency gains, computed as the difference between normative levels and actual levels, is being done, and this mechanism is well accepted, even by RInfra-D.

In view of the above, the Commission finds that there is no merit in RInfra-D's claim that the entire amount of interest on working capital is allowable to RInfra-D without any sharing. However, the same is subject to the Judgment of the Hon'ble Appellate Tribunal on the Appeal filed by TPC-D on the same issue in the context of the Tariff Order issued by the Commission for TPC-D dated September 12, 2010, which is presently pending before the Hon'ble Appellate Tribunal.

### **3.3 EFFICIENCY GAINS DUE TO LOWER DISTRIBUTION LOSSES FOR FY 2007**

The ATE, in its Judgment in Appeal No. 117 of 2008, ruled as following:

*“31. As this Tribunal had allowed the appeal with respect to distribution losses, the target level of 11.52% set by the Commission stood revised upward to 12.1%.*

*32. We find force in the contention of the appellant that the reduction in distribution losses has to be reckoned with respect to the distribution loss level of 12.1% approved by this Tribunal. We are inclined to agree with the contention of the appellant and, therefore, allow the appeal in this regard. The Commission is directed to re-work out the efficiency gains considering the reduction in distribution loss level from 12.10% to - 11.25%.”*

RInfra-D submitted the Commission had set the distribution loss target of 11.52% for RInfra-D for FY 2006-07, while as per the aforesaid judgment, the target distribution losses should be considered as 12.1%. Since, RInfra-D had achieved a reduction in distribution loss level upto 11.25%, in view of the judgment, the efficiency gains of RInfra-D for FY 2006-07 on account of reduction of distribution losses ought to be measured as the difference between 12.1% and 11.25%.

RInfra-D submitted that similarly, in view of the above ATE Judgment, the target level of distribution losses for FY 2007-08 for the purpose of working out efficiency gains should be considered as 12.10%.

RInfra-D submitted that the actual distribution losses during FY 2006-07 and FY 2007-08 have been 11.25% and 11.04% respectively, which when compared with the target losses of 12.10% (as justified above) translate into an increase in the efficiency gains of around Rs 12.79 Crore for FY 2006-07 and Rs. 34.13 Crore for FY 2007-08 as shown below:

**Table: ATE Impact- Distribution Loss Reduction Incentive, as submitted by RInfra-D**

S.No.	Particulars	UoM	FY 2006-07	FY 2007-08
A	Actual Distribution Losses	%	11.25%	11.04%
B	Target level of losses considered by MERC	%	11.52%	11.00%
C	Target level of losses Approved by Hon'ble ATE	%	12.10%	12.10%
D	Sales	MU	7,453	7,808
E	Input to Distribution System	MU	8,398	8,777
F	Revenue	Rs Crore	2,943.01	4,116.67
G	ABR	Rs /unit	3.95	5.27
H	Normative Losses @ 12.1%	MU	1,016	1,062
I	Actual Losses	MU	945	969
J	Additional Sales	MU	71	93
K	Additional Revenue	Rs Crore	28.19	49.05
L	Efficiency gain to be retained by RInfra -D		9.40	16.35
M	Efficiency gain to be retained by RInfra -D, allowed by MERC	Rs Crore	3.00	-0.72
N	Additional Entitlement to RInfra-D as per ATE Judgment	Rs Crore	6.40	17.07
O	Additional contribution to Reserves under Regulation 19.1	Rs Crore	6.40	17.07
P	Total Impact	Rs Crore	12.79	34.13

RInfra-D submitted that for the purpose of FY 2008-09, for which truing-up is to be carried out under this petition, RInfra-D has assumed the same loss reduction trajectory of 0.25% as considered by the Commission in the Tariff Order of June 4, 2008 and thereafter. Accordingly,

RInfra-D submits that the target level of distribution losses for FY 2008-09 be considered as 11.85% for the purpose of computing efficiency gains. Using this target loss level for FY 2008-09, RInfra-D has computed efficiency gains, which are included in the section on truing-up of FY 2008-09.

As regards the distribution losses to be considered for FY 2006-07, in accordance with the ATE Judgment referred to in RInfra-D's Petition, the Commission has now computed efficiency gains by considering the target loss level at 12.10% for FY 2006-07, since the actual losses were 11.25%, at Rs 18.79 Crore, out of which Rs 6 Crore has been allowed by the Commission in the APR Order for FY 2007-08 dated June 4, 2008. Hence, the net additional impact on ARR considered in the present Order is Rs 12.79 Crore, of which 50% will be added to the special reserve and 50% will be RInfra-D's entitlement.

In the above-said Judgment, ATE has ruled that the loss levels to be allowed for FY 2006-07 are 12.10%. In the present Petition, RInfra-D has submitted that the target distribution loss for FY 2007-08 should also be considered as 12.10%, in view of the ATE's Judgment dated December 11, 2007, in this regard. For FY 2008-09, RInfra-D had submitted in the present APR Petition that the target distribution loss level should be considered as 11.85%, by considering a 0.25% reduction over the loss level of 12.10% considered by RInfra for FY 2007-08. It may be noted that in the above-said ATE Judgment on RInfra-D's Appeal, prayer (i) has been recorded as "Direct MERC to freeze the distribution loss for FY 2008-09 at 11.25%". It should be noted that though RInfra's prayer before the ATE was that the distribution loss for FY 2008-09 should not be considered lower than 11.25% (as the Commission had considered the target loss level as 11%), in the present Petition, RInfra-D has considered the target distribution loss as 11.85% for FY 2008-09.

The Commission has clearly enunciated its views as regards the distribution loss norm to be considered for RInfra-D for FY 2007-08 in the APR Order for FY 2007-08 dated June 4, 2008, where the Commission has considered the distribution loss target as 11% for FY 2007-08 and 10.75% for FY 2008-09. For reference, the relevant paragraphs of the Order dated June 4, 2008 are reproduced below:

***"4.1.1 Distribution Losses***

*For FY 2007-08, the Commission set the distribution loss levels at 11.50% and considered target loss reduction of 0.5% every year thereafter in the Control Period. **The target of 11.5% was based on the base level of distribution loss of 12.1% in FY 2006-07***



*as submitted by REL, and as accepted by the ATE in its Judgment, based on REL's submissions.*

*In the APR Petition, REL referred to the ATE Judgment and stated that considering the actual losses in FY 2006-07 were 12.10%, REL has managed to reduce the distribution losses to 11.85%, by taking various measures as outlined below:*

- Due to availability of additional outlets from TPC, length of 33 kV cable laying required to feed the 33-22/11 kV substations is reduced, thereby contributing to reduction in losses*
- Installation of Automatic Power Factor Control (APFC) at 100 numbers of 11/0.4 kV substations with low power factor, has shown very good results in FY 2006-07, as average MD has reduced, and as technical loss is directly proportional to MD, saving in MD directly reflects in reduction in loss.*

*REL submitted that it has hence, considered the distribution losses as 11.85% in FY 2007-08, which is expected to be maintained in FY 2008-09, based on REL's efforts to contain the loss levels.*

*REL has also filed an Appeal in the ATE on the Commission's MYT Order, in the context of the distribution loss reduction trajectory, and the ATE in its Judgment held as follows:*

*"Admittedly loss reduction in distribution system is vital and in the interest of both the licensee and the consumers and, therefore, all efforts need to be made to reduce these losses. We recognize that the Commission is making all sincere efforts to ensure reduction of losses. We find that though specific numbers have been given while setting the target for the losses in three years of the control period, no study has been done either by the Commission or by the licensee while fixing these loss targets."*

*Accordingly, the ATE held that REL could not be directed to reduce the distribution losses further in the absence of any scientific study to assess the same, and REL should be allowed to claim distribution losses of 12.1% till such time a detailed study is conducted to assess the actual level of distribution losses.*

*The Commission has studied the technical loss study report submitted by REL in the context of assessment of distribution losses in REL-D's distribution system. REL-D has assessed the technical distribution losses as 10.45% based on its in-house study, and has*

*submitted that since the overall distribution losses are 12.10%, the balance losses of 1.65% are commercial losses. The study report submitted by REL-D is very detailed, and the Commission is not in a position to assess the veracity of the findings put out by REL-D's in-house study, in the absence of any study by an independent agency. The Commission may consider appointing an independent agency for assessing the actual level of technical losses and commercial losses in REL-D's distribution system. In the meantime, within two months of issue of this Order, RELD should submit a break-up of number of consumers residing in slums and the consumption and the number of consumers classified as 'non-slum' areas and their consumption, since REL has submitted that the commercial losses of these two groupings are significantly different. REL should also submit the basis for the statement made by REL in the proceedings before ATE that 65% customers come under the category of non-slum dwellers and 35% are slum dwellers, and that the distribution losses of non-slum consumers is less than 1% while losses in slum areas varies between 15% to 70% with an average of 22%.*

*In its APR Petition, REL has claimed distribution losses of 11.85% for FY 2007-08 and FY 2008-09. In this context, as discussed in the previous Section on truing up for FY 2006-07, **the actual distribution losses in FY 2006-07 at 11.25%, are significantly lower than the 12.10% indicated by REL-D. Since the trajectory of distribution loss reduction was based on the loss level of 12.10% as submitted by REL-D, the trajectory itself has to be revised to reflect the actual base distribution loss levels.** Pending independent technical study of REL's distribution losses, the Commission has considered the distribution loss level for FY 2007-08 at the level of 11.00% for the purposes of determining the energy input requirement, after considering the improvement of 0.25% projected by REL-D on account of installation of APFC Panels and due to availability of additional outlets.*

*For FY 2008-09, the Commission has added the projected loss reduction of around 27 MU due to installation of electronic meters, to the loss level of 11.00% considered for FY 2007-08, while determining the energy input requirement for FY 2008-09. The effective distribution losses considered by the Commission for FY 2007-08 thus, works out to 10.75%.*

***However, there is still scope for reduction in the commercial losses in REL-D's system, as submitted by REL-D itself, which has indicated commercial losses in some areas as high as 70%."(emphasis added)***

Accordingly, the Commission has estimated the efficiency loss on account of distribution loss by considering the normative level as 11% and 10.75% for FY 2007-08 and FY 2008-09, respectively, and hence, there is no additional impact due to efficiency gains/losses on account of distribution loss for FY 2007-08.

### 3.4 RATE OF INTEREST IN RESPECT OF DEFERRED RECOVERY

The ATE, in its Judgment in Appeal No. 117 of 2008, ruled as under:

*“47. As the MERC Regulations deploy the Short Term Prime Lending Rate of State Bank of India for working out interest on Working Capital there is no reason why the same yardstick is not used when it comes to applying interest rate on deferred payments. The licensee shall have to arrange the amount of deferred payment in the same way as the Working Capital. We, therefore, direct the Commission to allow Short Term Prime Lending Rate of SBI for deferred payments and incorporate the same while carrying out the truing up exercise for the year 2008-09.”*

RInfra-D submitted that the application of SBI short-term PLR on deferred recovery (regulatory assets) will have an additional impact of Rs 75.08 Crore. The Commission, while computing the ARR for FY 2008-09 in its Order of June 4, 2008 provided carrying cost on deferred recovery of Rs. 138 Crore and on trued-up revenue gap of FY 2006-07 of Rs. 180.43 Crore, as Rs. 16.56 Crore and Rs. 21.65 Crore, respectively. This carrying cost was computed by the Commission at the interest rate of 6% per annum. As per the ATE Judgment, these amounts would stand re-computed considering the carrying cost interest as that equivalent to short-term SBI PLR in the intervening financial years.

RInfra-D further submitted that as this is a principle issue, the carrying cost interest allowed by the Commission in FY 2007-08 truing-up also stands re-computed at the then prevailing SBI PLR. The total impact of carrying cost increase on these past revenue gaps, along with the SBI PLR considered during the corresponding periods is as shown below:

**Table: SBI PLR**

S.No.	Year	SBI PLR	Approved SBI PLR
A	2006-07	10.25%	10.75%
B	2007-08	11.50%	11.50%
C	2008-09	12.75%	12.75%
D	2009-10	13.00%	13.00%

**Table: ATE Impact- Carrying Cost, as submitted by RInfra-D (Rs. Crore)**

Particulars	Allowed in previous Order	Re-worked based on SBI PLR	Difference
<b>Allowed in June 2008 Order</b>			
Allowed Revenue gap of FY 2006-07 (Rs. 180.43 Crore)	21.65	39.24	17.59
Allowed Deferred recovery (Rs. 138 Crore) – 2 years interest upto FY 2008-09	16.56	30.02	13.46
<b>Allowed in June 2009 Order</b>			
Allowed deferred recovery (Rs. 138 Crore for 2 years and Rs. 178 crore for 2 years)	46.74	90.78	44.04
<b>Total</b>	<b>84.95</b>	<b>160.03</b>	<b>75.08</b>

In accordance with the ATE Judgment in Appeal No. 117 of 2008 in this regard, the Commission has considered the carrying cost based on SBI short-term PLR on deferred recovery considered in Order of June 4, 2008 and the Order dated June 15, 2009. The Commission, while determining the ARR for FY 2008-09 in its Order of June 4, 2008, provided carrying cost on deferred recovery of Rs. 138 Crore and on trued-up revenue gap of FY 2006-07 of Rs. 180.43 Crore as Rs. 16.56 Crore and Rs. 21.65 Crore, respectively, at the interest rate of 6% per annum. Similarly, the APR Order dated June 15, 2009 provided carrying cost on deferred recovery of Rs. 138 Crore and Rs. 178 Crore. The comparison of RInfra-D's submissions and the approval of the Commission in this respect are tabulated below:

(Rs. Crore)

Particulars	Allowed by Commission	RInfra-D		Commission		
		Re-worked based on SBI PLR	Difference	SBI PLR	Carrying Cost	Difference
<b>Allowed in June 08 Order</b>						
Allowed Revenue gap of FY 06-07 (Rs. 180.43 Crore)	21.65	39.24	17.59	10.75% & 11.50%	40.15	18.50

Particulars	Allowed by Commission	RInfra-D		Commission		
		Re-worked based on SBI PLR	Difference	SBI PLR	Carrying Cost	Difference
Allowed Deferred recovery (Rs. 138 Crore) – 2 years interest upto FY 09	16.56	30.02	13.46	10.75% & 11.50%	30.71	14.15
<b>Allowed in June 09 Order</b>						
Allowed Deferred recovery – MYT Order (Rs. 138 Crore for 2 years)	46.74	90.78	44.04	12.75% & 13%	81.37	34.63
Allowed Deferred recovery – APR Order for FY2007-08 (Rs. 178 cr for 2 years)						
<b>Total</b>	<b>84.95</b>	<b>160.03</b>	<b>75.08</b>		<b>153.82</b>	<b>67.27</b>

### 3.5 INCREMENTAL DEPRECIATION FOR ASSETS COMMISSIONED DURING THE YEAR

RInfra-D submitted that this issue is arising out of a Judgment of the ATE on TPC’s Appeal Nos. 137 of 2008, 138 of 2008 and 139 of 2008, respectively. The ATE has ruled as under:

*“In view of the provisions of the Tariff Regulations the Companies Act and the Accounting Standard-6, we find full justification and rationale in the contention of the appellant that proportionate depreciation has to be allowed even for part of the year when the assets have been put to use. The asset once put to use will be exposed to wear and tear which will not wait to depreciate till the start of the new financial year. We, therefore, allow the appeal in this view of the matter also.”*

In view of the above Judgment, RInfra-D requested the Commission to allow depreciation on incremental capitalization during the year as well, in addition to opening GFA. RInfra-D further submitted that as the Judgment applies to FY 2007-08 and FY 2008-09, the depreciation computation will have to revised from FY 2007-08 onwards.

RInfra-D submitted that the incremental depreciation for FY 2007-08, however, is a very small amount, as majority of capitalization in FY 2007-08 was towards the end of the financial year. However, additional depreciation has been worked out for assets commissioned during FY 2008-09 based on actual capitalization during FY 2008-09, in accordance with the dates on which the particular assets were added. Similarly, for FY 2009-10 as well, actual date of capitalization of assets has been considered.

Based on the ATE Judgments and the submissions made by RInfra-D, the Commission has considered the depreciation proportionately on the assets added during the year as well as on the opening GFA for all the years starting from FY 2007-08, subject to the extent of asset capitalisation approved by the Commission for the respective years. The impact of the same has been considered, along with the truing up for FY 2008-09 in Section 4 of this Order.

### **3.6 IMPACT OF ADDITIONAL CAPITALISATION FOR FY 2007-08**

RInfra-D submitted that the Commission in its Tariff Order dated June 15, 2009 allowed a capitalization of Rs. 120.90 Crore for FY 2007-08, as against actual capitalisation of Rs. 285.29 Crore for want of submission of Report by RInfra-D on benefits accrued from capex schemes. RInfra-D, vide its letter dated November 24, 2009 has submitted the Compliance Report containing the accrued benefits of all capex schemes since FY 2004-05 onwards to the Commission. Accordingly, RInfra-D has considered the total actual capitalization of Rs. 285.29 Crore and computed additional depreciation, interest on normative debt, return on equity and income tax due to the same.

The Commission, upon analysis of the aforementioned Compliance Report submitted by RInfra-D, has revised the capitalisation for FY 2007-08. The Commission has now allowed the full capitalisation of Rs. 285.29 Crore for FY 2007-08 as claimed by RInfra-D and the impact of the same has been considered in the current Order.

### **3.7 ISSUE OF FUNDING OF CAPITAL ASSETS THROUGH CONSUMER CONTRIBUTION**

RInfra-D submitted that the Commission in its Tariff Order dated June 15, 2009, in Case No. 121 of 2008 adjusted the entire consumer contribution amount from the regulated equity, consequently reducing regulatory equity and RoE. Further, RInfra-D submitted that Regulation 72.11 of the MERC (Terms and Conditions of Tariff) Regulations, 2005 specifies that consumer contribution has to be deducted from the original cost for the purpose of calculating the amount of loan capital and equity capital. Therefore, RInfra-D re-determined the allowable regulatory debt and equity from FY 2006-07 and recomputed the Interest and RoE, as against the approved values and the difference till end of FY 2007-08 has been considered as additional expense in RInfra-D's Petition. The cumulative impact for FY 2006-07 and FY 2007-08 has been included in FY 2010-11 as past period cost. Further, RInfra-D submitted that the Interest and RoE of FY 2008-09 and beyond have been computed using the revised opening balances of regulatory debt and equity and applying these principles for adjustment of yearly consumer contributions. RInfra submitted that for the above purpose, actual capitalization of FY 2007-08 has been considered as

against the approved values. RInfra-D requested the Commission to allow these incremental expenses through a separate revenue expense allowance in the ARR for FY 2010-11. The capitalisation and its break-up into allowable regulatory debt and equity for FY 2006-07 and FY 2007-08 are as following:

**Table: Capitalisation and Debt & Equity for FY 2006-07 and FY 2007-08 (RInfra-D)**

<b>FY</b>	<b>Capitalisation</b>	<b>Consumer Contribution</b>	<b>Capitalisation net of contributions</b>	<b>Regulatory Debt (70%)</b>	<b>Regulatory Equity (30%)</b>
2006-07	455.61	24.52	431.09	301.76	129.33
2007-08	285.29	29.68	255.61	178.93	76.68
<b>Total</b>	<b>740.90</b>	<b>54.2</b>	<b>686.70</b>	<b>480.69</b>	<b>206.01</b>

In accordance with the MERC Tariff Regulations, 2005, the Commission has revised the treatment of consumer contribution such that the same is deducted from the total capitalisation in order to arrive at the net capitalisation for the year. The Debt and Equity for FY 2006-07 and FY 2007-08 have been revised and the impact of the same has been separately considered in the present Order. However, capitalisation for FY 2006-07 has been considered as approved in the previous APR Order owing to the restatement of the capitalisation by RInfra-D in its APR Petition for FY 2008-09. Thus, a capitalisation of Rs 453.40 Crore has been considered against Rs. 455.61 Crore as claimed by RInfra-D, for revision of Debt and Equity component of FY 2006-07. The revised Debt and Equity for the respective years as allowed by the Commission are as shown below:

**Table: Capitalisation and Debt & Equity for FY 2006-07 and FY 2007-08 (Commission)**

<b>FY</b>	<b>Capitalisation</b>	<b>Consumer Contribution</b>	<b>Capitalisation net of contributions</b>	<b>Regulatory Debt (70%)</b>	<b>Regulatory Equity (30%)</b>
2006-07	453.40*	24.52	431.09	300.22	128.66
2007-08	285.29	29.68	255.61	178.93	76.68
<b>Total</b>	<b>740.90</b>	<b>54.2</b>	<b>686.70</b>	<b>480.69</b>	<b>206.01</b>

Note: \* - Considered same as approved in previous APR Order

The impact of revision in Capitalisation and difference in treatment of Consumer Contribution for FY 2006-07 and FY 2007-08, as submitted by RInfra-D and as computed by the Commission is as under:

*Table: Impact of revised approval of capitalisation and revised consumer contribution computation (Rs. Crore)*

<b>FY</b>	<b>RInfra-D</b>	<b>Approved by Commission</b>
2006-07	2.51	2.27
2007-08	20.98	20.88
<b>Total</b>	<b>23.49</b>	<b>23.15</b>

### 3.8 SUMMARY OF IMPACT FOR FY 2006-07 AND FY 2007-08

The total impact of all the above additional allowances in expenses has been summarised in the Table below:

**Table: Net Impact for FY 2006-07 and FY 2007-08 (Rs. Crore)**

<b>Particulars</b>	<b>Approved in Previous Order</b>	<b>RInfra-D Submission</b>		<b>Approved</b>	
		<b>Amount</b>	<b>Additional Impact</b>	<b>Amount</b>	<b>Additional Impact</b>
<b>A</b>	<b>b</b>	<b>c</b>	<b>d=c-b</b>	<b>e</b>	<b>f=e-b</b>
Interest on working Capital	23.96	51.90	27.94	34.59	10.63
Efficiency gains - Distribution Loss					
FY 2006-07	6.00	18.79	12.79	18.79	12.79
FY 2007-08	-1.44	32.70	34.14		
Carrying Cost	84.95	160.03	75.08	153.82	67.27
<b>Total Impact of ATE Order</b>	<b>114.91</b>	<b>263.42</b>	<b>149.95</b>	<b>207.20</b>	<b>90.70</b>
<b>Impact of Additional Capitalisation</b>	<b>618.17</b>	<b>641.66</b>	<b>23.49</b>	<b>641.32</b>	<b>23.15</b>
<b>Grand Total</b>			<b>173.44</b>		<b>113.84</b>



## **4 TRUING UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2008-09**

RInfra-D, in its Petition, sought approval for the final truing up of expenditure and revenue for FY 2008-09 based on actual expenditure and revenue as per audited accounts. RInfra-D provided the comparison of actual expenditure against each head with the expenditure approved by the Commission along with the reasons for deviations.

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

### **4.1 SALES**

RInfra-D submitted that the actual sales in FY 2008-09 was 8270 MU. RInfra-D, in its Petition, submitted category-wise retail sales data for FY 2008-09 and added that the deviation between the actual sales and approved sales is less than half a percent. RInfra-D submitted that its entire sale is metered. The summary of the sales considered by the Commission in the APR Order and actual sales is given in the Table below:

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

<b>Sl.</b>	<b>Particulars</b>	<b>APR Order</b>	<b>Actuals</b>
1	Sales	8230	8270

The Commission has considered the actual sales under the truing up process.

### **4.2 POWER PURCHASE QUANTUM AND COST FOR FY 2008-09**

The Commission, in its APR Order dated June 15, 2009 in Case No. 121 of 2008 considered the total quantum of power purchase of 9514 MU for FY 2008-09 from Reliance Infrastructure Limited - Generation Business (RInfra-G), The Tata Power Company-Generation Business (TPC-G), Renewable Energy (RE) sources, short-term power purchase from external sources and imbalance pool, based on provisional numbers submitted by RInfra-D. However, the actual quantum of power purchased by RInfra-D from various sources during FY 2008-09 as submitted in RInfra-D's APR Petition, is slightly higher at 9676 MU.

The Commission, in its above-said APR Order dated June 15, 2009 in Case No. 121 of 2008 had considered total power purchase expenses of Rs. 4748.31 Crore, excluding transmission charges, Maharashtra State Load Despatch Centre (MSLDC) charges and Standby Charges, while the actual power purchase expense for FY 2008-09 as submitted by RInfra-D in its present APR Petition is Rs. 4827.75 Crore, excluding transmission charges, MSLDC charges and Standby Charges. The source-wise analysis is presented in the paragraphs below:

#### **4.2.1 Power Purchase from RInfra-G**

RInfra-D submitted that it had purchased entire power generated by RInfra-G during FY 2008-09, which has a capacity of 500 MW. The energy purchased by RInfra-D from RInfra-G in FY 2008-09 is 4025 MU at an average cost of Rs. 2.48 per unit.

As regards actual purchase from RInfra-G during FY 2008-09, the Commission has considered the net energy available and cost of power purchase from RInfra-G for FY 2008-09 in accordance with the Commission's Order dated September 08, 2010 in Case No. 99 of 2009 for RInfra-G in the matter of Truing up for FY 2008-09, APR for FY 2009-10 and Determination of Tariff for FY 2010-11. Accordingly, the Commission has approved the actual cost of power purchase by RInfra-D from RInfra-G. The summary of power purchase by RInfra-D from RInfra-G as approved in the APR Order, as submitted by RInfra-D, and as approved after final truing up, is tabulated as under:

Source	RInfra-D		Approved after truing up	
	Quantum (MU)	Total Cost (Rs Crore)	Quantum (MU)	Total Cost (Rs Crore)
RInfra-G	4024.52	999.89	4024.52	999.89

#### **4.2.2 Power Purchase from TPC-G**

RInfra-D submitted that in accordance with the Tariff Order dated June 4, 2008, RInfra-D procured 500 MW from TPC-G amounting to 2836.72 MU in FY 2008-09 at an average cost of Rs. 4.79 per unit.

Source	RInfra-D		Approved after truing up	
	Quantum (MU)	Total Cost (Rs Crore)	Quantum (MU)	Total Cost (Rs Crore)
TPC-G	2836	1357	2836	1357

The Commission has approved the actual cost of power purchase by RInfra-D from TPC-G.

### **4.2.3 Power Purchase from other Sources**

RInfra-D submitted that there was a demand-supply mismatch, i.e., insufficient availability of power from RInfra-G (DTPS) and TPC-G, as compared to the demand from consumers. The shortage of power in FY 2008-09 has been met through purchase of power under bilateral contracts from external sources.

RInfra-D submitted that each distribution licensee is required to source its power requirement to meet the demand in its area of supply. RInfra-D submitted that in order to have better flexibility of power management (procurement and sale of surplus power, if any) and to prevent artificial competition in favour of the suppliers, a Mumbai Power Management Group (MPMG) had been formed with equal representation of all three distribution licensees in Mumbai. RInfra-D added that 28.14% of the power procured by PMG was allocated to RInfra-D for the month of April 2008, which was increased to 42.85% for May and June 2008, and further increased to 70% from July 2008 to March 2009. Further, from September 2008 onwards, RInfra-D also procured bilateral power on its own, apart from the 70% share of power procured by PMG.

RInfra-D submitted that it purchased 1718 MU at a total cost of Rs. 1502.78 Crore. Thus, the average price of power purchase from bilateral contracts works out to be Rs. 8.75 per unit.

As regards purchase from the imbalance pool, RInfra-D submitted that as per the Interim Balancing and Settlement Mechanism (IBSM) approved by the Commission, the monthly energy balancing and accounting is undertaken by MSLDC, wherein all surplus power available in the Imbalance Pool is set off against the deficits. Through this mechanism, RInfra-D has absorbed 1075 MU of power from the State pool during the period FY 2008-09, and has paid for the same based on the monthly System Marginal Price worked out by the MSLDC, in accordance with the method specified by the Commission.

The Commission has approved the quantum and cost of power purchase from short-term sources and from imbalance pool as submitted by RInfra-D for FY 2008-09, under the final truing up exercise.

The summary of power purchase by RInfra-D from other sources is given in the following table:

Source of Power	FY 2008-09					
	APR Order		Actual		Approved	
	Quantum	Total Cost	Quantum	Total Cost	Quantum	Total Cost
	(MU)	(Rs. Crore)	(MU)	(Rs. Crore)	(MU)	(Rs. Crore)
Bilateral	1920	1683.44	1718	1502.78	1718	1502.78
Imbalance Pool	742	701.41	1075	960.33	1075	960.33
<b>Total</b>	<b>2662</b>	<b>2384.85</b>	<b>2793</b>	<b>2463.11</b>	<b>2793</b>	<b>2463.11</b>

#### **4.2.4 Renewable Sources**

As regards the purchase from Renewable Energy sources for FY 2008-09, RInfra-D submitted that it purchased only 22.28 MU of Renewable Energy as against the RPS target of 483.81 MU. RInfra-D submitted that the reasons for shortfall in RE procurement was primarily due to supply-side constraints leading to unavailability of RE for procurement. RInfra-D added that it has brought these issues to the notice of the Commission vide its Petition in Case No. 122 of 2008. The Commission, vide its Order dated August 07, 2009 acknowledged the existence of supply-side constraints and other uncontrollable factors as being the reasons for shortfall in RE procurement by RInfra-D and modified the target of RE procurement to lower of actual and target as stipulated under RPS Order dated August 16, 2006.

Considering the above, the Commission has approved purchase of 22.28 MU from renewable sources at purchase cost of Rs. 7.80 Crore for FY 2008-09. However, the Commission directs RInfra-D to expedite its activities to procure power from possible renewable sources to meet the targets as specified by the Commission.

#### **4.2.5 Past period adjustments/payments attributable to power purchase**

As regards the past period adjustments/payments attributable to power purchase, RInfra-D in its Petition submitted that in addition to the stand-alone power purchase costs of FY 2008-09, RInfra-D has made a payment of Rs. 4.80 Crore to BEST towards bilateral purchase of power via MPMG, pertaining to March 2008. RInfra-D added that since the debit note was raised a bit late by BEST, the payment was made only in April 2008 and hence, accounted for in FY 2008-09. Further, payment of Rs. 3.25 Crore was made to TPC on account of the ATE's Order on Appeal No 1 of 2007 dated May 09, 2008 in the matter on reverse flow of energy and reactive drawal of

energy at 220 kV interconnection point. Also, an accounting adjustment of Rs. 0.02 Crore was made on account of power purchase from TPC in FY 2008-09. Thus, a total of Rs. 8.05 Crore has been included over and above stand-alone costs of power purchase in FY 2008-09.

The Commission observed that as regards payment made to BEST in April 2008, RInfra-D has submitted the amount to be Rs 4.80 Crore in the APR Petition, however, Rs 4.48 Crore has been considered in the Formats submitted along with the APR Petition. Since the totals tally in the Formats submitted along with the APR Petition, the Commission has considered Rs 4.48 Crore on this account for FY 2008-09.

#### **4.2.6 Reduction in Power Purchase Requirement through DSM**

RInfra-D submitted that the Commission through its Tariff Order dated June 15, 2009 in Case No. 121 of 2008, had specified a target for reduction of 1% of costly power purchase requirement, which translated to 0.10% of total power purchase, amounting to Rs. 16.01 Crore. Further, RInfra-D submitted that it has achieved total savings of 12.87 MU through various DSM measures. The average rate of costly power purchased by RInfra in FY 2008-09 is Rs. 8.7 per unit. Hence, the abovementioned savings of 12.87 MU translate to Rs. 11.12 Crore. RInfra-D added that the aforesaid results are on account of those schemes only, whose benefits are measurable.

RInfra-D submitted the details of the actual power purchase reduction achieved through various DSM measures initiated by RInfra-D, as shown in the Table below:

<b>Title</b>	<b>Description</b>	<b>Life of technology</b>	<b>Project Period</b>	<b>Quantity Nos</b>	<b>Energy Saving in 2008-09</b>
CFL Scheme	Distribution of 15 W CFL through a special scheme	3 years	Jan 2006 to Jan 2007	617436	7.64 MU
APFC Panels	APFC Panels installation at substations with Low P.F.	10 Years	Mar 2006 to April 2007	380	2.43 MU
Streetlight conversion	Streetlight conversion from HPMV to HPSV	5 Years	Jan 2008 to Aug 2008	36476	2.80 MU
<b>Total Savings</b>		<b>12.87 MU</b>			

The Commission has taken note of RInfra-D's submission in this regard. While truing up the power purchase expenses for FY 2008-09, the Commission has not deducted any amount towards DSM measures, since the Commission had not specified any method for measurement and verification of the savings achieved, and the base line studies had also not been conducted.

#### **4.2.7 Transmission Charges**

As regards transmission charges, RInfra-D submitted that in accordance with the Commission's Order dated May 31, 2008 in Case No. 104 of 2007, RInfra-D's share of TTSC was Rs. 221.63 Crore for FY 2008-09. However, as the aforesaid Order was applicable from June 1, 2008, therefore, RInfra-D, during the first two months, i.e., April-08 and May-08, made the payment towards transmission charges in accordance with the dated April 2, 2007 in Case No. 86 of 2006, which was applicable during the period April 08 to May 08. Hence, the actual transmission charges paid during FY 2008-09 works out to Rs. 216.28 Crore.

<b>Period</b>	<b>Order Applicable</b>	<b>Annual Transmission Charges (Rs. Crore)</b>	<b>Monthly Transmission Charges (Rs. Crore)</b>	<b>Total Payment (Rs. Crore)</b>
April-08 and May-08 (2 months)	2-Apr-07	189.55	15.8	31.59
June-08 to March-09 (10 months)	31-May-08	221.63	18.47	184.69
<b>Total</b>				<b>216.28</b>

The actual transmission charges of Rs 216.28 Crore paid by RInfra-D have been considered by the Commission under the truing up exercise.

#### **4.2.8 MSLDC Charges**

As regards the MSLDC charges, RInfra-D submitted that it has considered an amount of Rs. 1.52 Crore for FY 2008-09, in accordance with the approved figures, which has been considered by the Commission under the truing up exercise.

#### **4.2.9 Standby Charges**

As regards Standby Charges being paid to Maharashtra State Electricity Distribution Company Ltd. (MSEDCL), RInfra-D submitted that it has made a payment of Rs. 220.40 Crore to MSEDCL during FY 2008-09 towards standby charges, as approved by the Commission in its APR Order dated June 4, 2008 in Case No. 66 of 2007.

The actual stand-by charges for FY 2008-09 works out to Rs 222.40 Crore, as approved by the Commission in its Tariff Order dated June 15, 2009, hence, an additional amount of Rs. 2 Crore was paid to MSEDCL in FY 2010-11. RInfra-D submitted that this additional amount has been added to the standby charges for FY 2010-11.

The Commission has considered standby charges of Rs 222.40 Crore for FY 2008-09 as approved in the APR Order dated June 15, 2009, and correspondingly reduced Rs 2 Crore from the standby charges for FY 2010-11 as submitted by RInfra-D.

#### **4.2.10 Summary of Power Purchase Costs**

The summary of power purchase quantum and costs, including Standby Charges and transmission tariff for FY 2008-09 as approved by the Commission after final truing up, is given in the following Table:

*Table: Summary of Power Purchase Quantum and Costs for FY 2008-09*

Source	APR Order		RInfra-D's APR Petition		Approved after final truing up	
	Quantum (MU)	Total Cost (Rs Crore)	Quantum (MU)	Total Cost (Rs Crore)	Quantum (MU)	Total Cost (Rs Crore)
DTPS	3,943	967.69	4025	999.89	4025	999.89
TPC-G	2,845	1,373.46	2836	1356.95	2836	1356.95
Outside License Area Sale						
Short Term/bilateral sources	1,920	1,683.44	1718	1502.78	1718	1502.78
RPO	64	22.32	22	7.8	22	7.8
Other						
Imbalance Pool	742	701.41	1075	960.33	1075	960.33
Standby Charges		222.4		220.4		222.4
Transmission Charges		221.63		216.28		216.28
SLDC Charges		1.52		1.52		1.52
Payment to BEST towards bilateral adjustment				4.48		4.48
Reactive power compensation				3.25		3.25
Bilateral adjustment				0.02		0.02
Reduction of Cost (DSM)		-16.01				
<b>Total</b>	<b>9,514</b>	<b>5177.86</b>	<b>9676</b>	<b>5273.70</b>	<b>9676</b>	<b>5275.70</b>

### 4.3 TRANSMISSION LOSSES

RInfra-D submitted that in accordance with the IBSM statements the Intra-State Transmission Losses (InSTS) for FY 2008-09 is 4.86%, which has been accepted by the Commission.

### 4.4 DISTRIBUTION LOSSES AND ENERGY BALANCE

RInfra-D submitted that with continuous efforts for improving operational efficiency of the distribution system, the distribution losses have been contained at 10.16% for FY 2008-09. The computation of losses are based on sales and input energy considered by the Maharashtra State Load Despatch Centre (MSLDC) under the Interim Balancing and Settlement Mechanism (IBSM) statements for each month of FY 2008-09.

*Table: Energy balance for FY 2008-09*

Particulars	Unit	Actuals	Approved after final truing up
RInfra-D Sales (Retail)	MU	8270	8270
Distribution Losses	%	10.16%	10.16%
Energy Requirement (T < > D Interface)	MU	9206	9206
Transmission Loss	%	4.86%	4.86%
Net Energy Requirement	MU	9676	9676

The Commission has considered the energy requirement of 9676 MU at G < > T Interface as submitted by RInfra-D in its Petition. Considering the actual sales of 8270 MU in FY 2008-09, the actual distribution loss works out to 10.16%, as submitted by RInfra-D.

### 4.5 O&M EXPENSES

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

RInfra submitted that the expenses incurred on repairs and maintenance are primarily driven by the age of equipment, loading conditions, and preventive maintenance requirements to proactively deal with changing loading conditions and weather patterns, breakdown maintenance, etc., since the sole objective of R&M expenses is to keep the network in a healthy



state to reliably supply power to the consumers. RInfra-D added that employee expenses and A&G expenses, on the other hand, are directly linked to the magnitude of operations, in addition to inflation, since, even if inflation is zero, the expenses of the Company would grow, both in relation to the scale of operations as well as in response to the fact that the salaries and wages of employees are not only linked to economy-wide inflation indices, but are also driven by market conditions, competitive pressures and consequently the need to retain and nurture talent. RInfra further added that in electricity utilities such as RInfra, where traditionally the salaries and wages have been driven by DA indices, a linkage with mere inflation does not even cover the natural year-to-year increase in salaries, as the DA Index does not move at the same rate as an economy-wide inflation index such as CPI or WPI. RInfra-D requested the Commission to consider these facts while analyzing the prudence of O&M expenses.

#### **4.5.1 Employee Expenses**

RInfra-D submitted that the total actual employee expenses for FY 2008-09 were Rs. 298.81 Crore. RInfra-D added that for FY 2007-08, the Commission approved employee expenses of Rs. 266.27 Crore. Thus, the employee expenses have increased by about Rs. 32.54 Crore (about 12%) for FY 2008-09 as compared to previous year. The Commission, in its APR Order dated June 15, 2009 in Case No. 121 of 2008 approved the total employee expenses of Rs 285.73 Crore for FY 2008-09.

RInfra-D submitted that the major reasons for increase in employee costs is attributable primarily to the reasons of change in salary structure on account of movement of employees from GPA structure to CTC structure and consequent increase in salaries as well as allocation of higher proportion of CTC towards allowances such as conveyance, HRA, etc. Further, RInfra-D added that the Dearness Allowance (DA) Index for FY 2008-09 (affecting only those employees who continued to be under GPA structure in FY 2008-09) of Officers and Staff cadre of employees has shown significant increase in the period and it forms an important component in the realignment of wages of employees in addition to increase on account of performance and to retain employees. RInfra-D submitted that the DA movement is an uncontrollable factor.

The Commission asked RInfra-D to submit justification for all heads, where the increase in expenditure is over 5% on year-on-year basis. The Commission has accepted the justification submitted by RInfra-D, and approved the actual employee expenses, however, since, RInfra-D has not justified the increase in Overtime Payment, Bonus/Ex-Gratia payments and Staff welfare expenses, for these heads, the Commission has allowed an increase of around 7.31% p.a. on

account of inflation factor corresponding to increase in Consumer Price Index (CPI) over FY 2007-08 as approved in APR Order dated June 15, 2009. Thus, the employee expense amounting to Rs 7.63 Crore have not been approved as the justification for the same was not submitted to the Commission.

The summary of employee expenses approved in the APR Order, actual employee expenses claimed by RInfra-D, and employee expenses approved after truing up for FY 2008-09 has been shown in the following Table:

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

Particulars	APR Order	Actuals	Allowed after truing-up
Employee Expenses	285.73	298.81	291.18

The Commission has considered the difference between the allowed employee expenses and actual employee expenses under the sharing of gains and losses due to controllable factors, since employee expense is a controllable expense.

#### **4.5.2 Administrative and General Expenditure**

RInfra-D submitted that it has incurred an amount of Rs. 112.88 Crore towards A&G expenses for FY 2008-09. RInfra-D added that for FY 2008-09, the increase in A&G expenses is to the tune of 5% over the actual expenses of Rs. 107.43 Crore for FY 2007-08. Further, RInfra-D submitted that the reasons for increase in expenses are:

- Increase in rents and taxes of Rs. 4.17 Crore on account of new premises undertaken for godown purposes, with a view to centralize O&M and capex stores, increase in property taxes on existing premises, increase in lease rental for Aarey substation, etc.;
- Increase in expenses of Rs. 0.59 Crore towards licence and other legal fee paid to the Commission, due to higher revenue in FY 2008-09, as license fee is linked to revenue;
- Increase in postage related expenses on account of new customer mailers to explain increase in tariffs, increase in disconnection notices, customer awareness mailers, etc., to the extent of Rs. 1.20 Crore.
- Increase in Security Charges by Rs. 1.81 Crore on account of deployment of greater security, addition of newer installations and consequent security arrangements.

The Commission, in its APR Order dated June 15, 2009 in Case No. 121 of 2008 approved the total A&G expenses of Rs 105.36 Crore for FY 2008-09.

The Commission asked RInfra-D to submit justification for all heads, where the increase in expenditure is over 5% on year-on-year basis. The Commission has accepted the justification submitted by RInfra-D, and approved the actual A&G expenses.

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

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

Particulars	APR Order	Actuals	Allowed after truing-up
A&G Expenses	105.36	112.88	112.88

#### **4.5.3 Repairs and Maintenance Expenditure**

RInfra-D submitted that the actual R&M expense for FY 2008-09 was Rs. 136.47 Crore as against Rs. 141.14 Crore approved by the Commission in the APR Order issued on June 15, 2009. R-Infra-D submitted that the increase in actual R&M expenses in FY 2008-09 as against the actual R&M expenses of Rs. 135.19 Crore for FY 2007-08 was 1%.

Hence, the Commission has allowed actual R&M expenses as submitted by RInfra-D and has considered the difference between the allowed R&M expenses and actual R&M expenses under the sharing of gains and losses due to controllable factors, since R&M is a controllable expense. The summary of R&M expenses approved in the Order, actual R&M expenses, and R&M expenses approved after truing up for FY 2008-09 has been shown in the following Table:

**Table: R&M Expenses (Rs Crore)**

Particulars	APR Order	Actuals	Allowed after truing-up
R&M Expenses	141.14	136.47	136.47

#### **4.6 CAPITAL EXPENDITURE AND CAPITALISATION**

RInfra-D submitted that during FY 2008-09, it has incurred capital expenditure of Rs. 448.11 Crore and Rs. 456.69 Crore has been capitalized vis-à-vis Rs. 192.86 Crore capitalization

approved by the Commission. RInfra-D added that the Commission had approved lower capitalization pending submission of Report on benefits achieved from the schemes. RInfra-D, vide its letter dated November 24, 2009 has submitted the Report on benefits to the Commission and accordingly considered the actual capitalization during FY 2008-09 for the purpose of truing-up. RInfra-D submitted summary of total capitalization as given below:

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

DPR schemes			Non-DPR schemes	Total capitalisation
Approved	Submitted, approval not received	Not submitted*		
350.28	49.08	18.21	39.06	456.69

*\*Not submitted refers to non-submission of Street Lights scheme during FY 2008-09. However, the same has been submitted subsequently*

As regards the Commission's query regarding the 65% increase in the cumulative capital expenditure vis-a-vis the approved cost on 11 kV Mains and Distribution Transformers scheme till FY 2008-09, RInfra-D submitted that the same mainly involves schemes for laying of 11 kV cables and due to various reasons, such as non-availability of permissions for excavation from MCGM/MBMC or private parties, some of these schemes get carry forwarded year-on-year. The expenses have also gone up due to increase in Road Re-Instatement (RI) charges. Another significant reason for increase in expenditure is the increase in unit cost of Dry-Type Distribution Transformers.

As regards approval of capitalisation during the year, the Commission, in its previous APR Order, had made the following observations:

- In the absence of documentary evidence that the stated purpose and objective of the capex schemes have been achieved, the Commission is restricting the capitalization considered for the purposes of determination of ARR and tariff. Once the utilities submit the necessary justification to prove that the scope and objective of the capex scheme has been achieved as projected in the DPR, the same may be considered in future Orders.
- The Commission has decided that the total capital expenditure and capitalization on non-DPR schemes in any year should not exceed 20% of that for DPR schemes during that year.

The Commission had issued a direction in this respect in the previous APR Order (Order dated June 15, 2009 in Case No. 121 of 2008), restricting the capitalisation of such schemes to 20% of the capitalisation of DPR schemes during the year. The rationale for the same was as under:

#### **"4.7 CAPITAL EXPENDITURE AND CAPITALISATION**

...

*In this context, the Commission observes that the revision in ARR/tariff sought by different Utilities as a part of the Annual Performance Review (APR) process for FY 2008-09 can be attributed primarily to increase in power purchase cost of distribution licensees and the steep increase in capital expenditure and capitalisation being undertaken by the Utilities in recent years. ...However, the issue of steep increase in capital expenditure and capitalisation is a generic issue and relevant for all the Utilities. The Commission appreciates that the investment on capex schemes is an ongoing process for any Utility/Licensee. It is required for healthy system development with tangible and intangible benefits. The scope, objective and benefits are identified while formulating project reports. After implementation of the scheme, before capitalisation, the benefits are to be demonstrated by the Utility. The Utility is required to execute the capex schemes in a phased manner so as to minimise tariff shock attributable to capex implementation. The Commission can permit capex in ARR only after prudence check as there is an impact on tariff.*

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

...

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

*It is clear from the above Table that the Gross Fixed Assets have increased by around 28%, 230%, and 104% for the Generation, Transmission, and Distribution Business, respectively, over the last five years. The pace of asset addition has increased by leaps and bounds over the last five years. RInfra-D has projected to almost double its asset base (as in FY 2004-05) by the end of FY 2009-10, while RInfra-G and RInfra-T have proposed to increase their asset base (as in FY 2004-05) to around 1.3 to 3.3 times.*

*Further, when RInfra was operating in an integrated manner in FY 2004-05, the total asset addition every year was less than around Rs. 200 Crore, whereas in FY 2008-09 and FY 2009-10, the Transmission and Distribution Businesses are individually adding*

*assets of more than this amount every year on an average, while the capital asset addition in Generation Business has also increased significantly in scale. The addition to the asset base is clearly not commensurate either with the increase in sales or increase in demand in MW served. Since the Utilities were able to serve the existing consumer base well enough with the existing assets, the rationale for this steep increase in the asset base needs to be examined further.*

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

...

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

...

*Further, the Commission has observed that most of the Utilities have projected very high non-DPR schemes, and in some cases, the capital expenditure and capitalisation projected under non-DPR schemes is several times that projected under DPR schemes. This defeats the very purpose of classifying schemes costing above Rs. 10 Crore as DPR schemes and requiring regulatory scrutiny of the schemes.*

...

*In view of the above, as a general rule, the Commission has decided that the total capital expenditure and capitalisation on non-DPR schemes in any year should not exceed 20% of that for DPR schemes during that year. To achieve the purpose, the purported non-DPR schemes should be packaged into larger schemes by combining similar or related*

*non-DPR schemes together and converted to DPR schemes, so that the in-principle approval of the Commission can be sought in accordance with the guidelines specified by the Commission..."*

The Commission has analysed the actual benefits accrued and the benefits projected for various schemes capitalised by RInfra-D and the same has been considered while approving the capitalisation for FY 2008-09. As regards approval of capitalisation of DPR schemes, the capitalisation towards schemes already approved in-principle by the Commission has been considered. Besides, it was observed that RInfra-D considered the scheme "Metering & Instruments" with capitalisation of Rs 0.58 Crore under the head "DPR submitted to MERC pending approval". However, the same is an approved scheme and has now been considered by the Commission. It is also observed that the capitalisation against non-DPR schemes during FY 2008-09 is within the limit as directed in the previous APR Order and the same has been considered for approval.

Accordingly, approved capitalisation for FY 2008-09 is summarised in the following Table:

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

<b>Particulars</b>	<b>APR Order</b>	<b>Actuals</b>	<b>Allowed after truing up</b>
Capitalisation	192.86	456.69	389.98

#### **4.7 DEPRECIATION AND ADVANCE AGAINST DEPRECIATION**

The Commission, in its APR Order dated June 15, 2009, had permitted depreciation for Distribution business (Retail Supply and Wire) to the extent of Rs. 72.12 Crore for FY 2008-09, which amounted to 2.97% of the Opening level of Gross Fixed Assets (GFA) of RInfra-D for FY 2008-09, which was stated at Rs. 2427.62 Crore. RInfra-D, in its APR Petition, submitted that in accordance with the MERC (Terms and Conditions for Tariff) Regulations, 2005, none of the assets had been depreciated beyond 90% of its book value. RInfra-D added that no advance against depreciation has been considered. RInfra-D submitted that the actual depreciation expenses incurred for FY 2008-09 amounts to Rs. 109.60 Crore. The Opening GFA for FY 2008-09 has been revised based on the revised approval of capitalisation for the previous years as elaborated in Section 3.6 of this Order. Further, for the purpose of computing depreciation for FY 2008-09, the asset addition during the year has also been taken into account for which the month-wise asset addition details as submitted by RInfra-D was considered by the Commission.

**Table: Approved Depreciation Expenses (Rs Crore)**

Particulars	FY 2008-09		
	APR Order	Actuals	Approved after truing up
<b>TOTAL</b>			
Depreciation	72.12	109.64	99.72
Opening GFA	2427.62	2594.18	2592.01
Closing GFA	2606.53	3006.61	2937.73
<b>Wire Related</b>			
Depreciation	54.56	85.39	85.93
Opening GFA	2086.22	2179.39	2215.58
Closing GFA	2277.85	2581.93	2599.91
<b>Retail Supply Related</b>			
Depreciation	17.55	24.25	13.79
Opening GFA	341.40	414.79	376.43
Closing GFA	328.68	424.68	337.82

#### **4.8 LOAN REPAYMENT SCHEDULE**

RInfra-D submitted that normative loan repayment tenure of 10 years has been considered for loans drawn during FY 2004-05 and FY 2005-06 and 20 years for loans drawn during FY 2006-07 and afterwards. The Commission has considered the same loan repayment schedule as submitted by RInfra-D.

#### **4.9 INTEREST EXPENSES**

The Commission, in its APR Order dated June 15, 2009, had approved interest expense of Rs. 62.69 Crore for FY 2008-09. RInfra-D, in its Petition, submitted that it has considered a normative Debt: Equity ratio of 70:30 for financing the projects. Further, RInfra-D submitted that it has deducted consumer contribution from the total capitalisation of the year to arrive at the net capitalisation, and 70% of such net capitalisation has been considered as normative debt for the purpose of computation of interest expenses for the year. RInfra-D has considered a normative interest rate of 10% p.a. for projects initiated during FY 2004-05 and FY 2005-06 and 8% towards interest expense for projects initiated during FY 2006-07 and FY 2007-08



respectively. RInfra-D submitted that it has considered a normative interest rate of 9%, for computing the interest on Long Term Loan capital for FY 2008-09. RInfra-D submitted that the interest expenditure towards long-term loan works out to Rs. 65.90 Crore for Wire Business and Rs. 13.25 Crore for Retail Supply Business.

For the purpose of final true-up of interest expense for FY 2008-09, the Commission has considered the interest expense on the normative debt corresponding to capitalised assets only and has considered the interest rate of 10% p.a. for the assets put to use during FY 2004-05 and FY 2005-06 and interest rate of 8% p.a. for assets put to use during FY 2006-07 and FY 2007-08 in line with the principles adopted in the APR Order dated May 28, 2009. For FY 2008-09, the Commission has considered an interest rate of 9% in line with the rate considered in the previous APR Order. Further, in the case of interest expense for FY 2008-09, the Commission has considered the loan drawal, loan repayment and interest expense based on net capitalisation adjusted for Consumer Contribution. Accordingly, the interest expense during FY 2008-09 works out to Rs. 77.17 Crore as against Rs. 79.14 Crore as claimed by RInfra-D and as shown in the following Table:

**Table: Interest Expenses**

**(Rs Crore)**

<b>Particulars</b>	<b>APR Order</b>	<b>Actuals</b>	<b>Allowed after truing up</b>
<b>Total Loans</b>			
Op. Balance	675.15	769.75	769.63
Additions	135.00	309.81	263.12
Repayments	72.84	65.19	62.78
Cl. Balance	737.30	1014.37	969.97
<b>Interest</b>	<b>62.69</b>	<b>79.14</b>	<b>77.17</b>
Overall Interest Rate	9.3%	8.9%	8.9%
<b>Wire Related</b>			
Op. Balance	573.88	636.66	643.84
Additions	135.00	275.46	262.71
Repayments	(59.83)	(54.39)	(53.67)
Cl. Balance	649.05	857.73	852.88
<b>Interest</b>	<b>53.88</b>	<b>65.90</b>	<b>66.10</b>
Overall Interest Rate	8.8%	8.8%	8.8%

<b>Particulars</b>	<b>APR Order</b>	<b>Actuals</b>	<b>Allowed after truing up</b>
<b>Retail Related</b>			
Op. Balance	101.27	133.09	125.79
Additions	0.00	34.36	0.40
Repayments	(13.01)	(10.80)	(9.10)
Cl. Balance	88.26	156.64	117.09
<b>Interest</b>	<b>8.82</b>	<b>13.25</b>	<b>11.06</b>
Overall Interest Rate	9.3%	9.1%	9.1%

#### **4.10 INTEREST ON WORKING CAPITAL AND CONSUMERS' SECURITY DEPOSIT**

As regards Interest on Working Capital, RInfra-D submitted that in accordance with the MERC (Terms and Conditions for Tariff) Regulations, 2005, the interest on working capital for FY 2008-09 works out to Rs. 50.85 Crore. In the APR Order dated June 15, 2009 the Commission had allowed interest on working capital and consumers' security deposit as Rs. 47.69 Crore FY 2008-09. RInfra-D added that in accordance with the ruling of the ATE, RInfra-D has not considered any payables to RInfra-G towards the power procured from it, while computing the working capital requirement for the Distribution Business.

As regards consumer's security deposits, RInfra-D has considered Interest on Consumer Security Deposit at 6% amounting to Rs. 15.11 Crore for Retail Supply Business.

The Commission observed that RInfra-D, while calculating "One Month Equivalent of cost of power" component in the computation of Interest on Working Capital (IoWC), has considered power purchase cost excluding power purchase cost from RInfra-G. The Commission has accepted the methodology and excluded the cost of power purchase from RInfra-G while deducting the power purchase cost, while computing the working capital requirement, in accordance with the ATE Judgment discussed in Section 3.1 of this Order.

The Commission has estimated the normative working capital requirement and interest thereof for FY 2008-09 based on the revised expenses approved in this Order after truing up. However, interest on working capital is a controllable parameter as defined under the MERC Tariff Regulations, and the Commission has therefore, computed the sharing of gains/losses on the basis of normative working capital interest and the actual working capital interest incurred,

which in this case is zero, since this is a controllable parameter. The detailed rationale for such a treatment is provided in Section 3 of this Order. Further, the MERC Tariff Regulations stipulate that rate of Interest on Working Capital shall be considered on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on the date on which the Application for determination of tariff is made. As the short-term Prime Lending Rate of State Bank of India at the time when RInfra-D filed the Petition for tariff determination for FY 2008-09 was 12.75%, the Commission has considered the interest rate of 12.75% for estimating the normative Interest on Working Capital, which works out to Rs. 50.74 Crore.

RInfra-D's computation of interest on consumers' security deposit has been accepted by the Commission. Thus, the total Interest on Working Capital and the interest on consumers' security deposit, considered by the Commission under the truing up exercise, works out to Rs. 65.86 Crore.

#### **4.11 PROVISIONING FOR BAD DEBTS**

In the APR Order dated June 15, 2009 the Commission had allowed provisioning for bad and doubtful debts as Rs. 5 Crore for FY 2008-09. RInfra-D submitted that based on the position of receivables and days of receivables, the actual provision of bad debts is Rs. 2.50 Crore for FY 2008-09.

For the purposes of truing up for FY 2008-09, the Commission has considered provisioning for bad debts as Rs. 2.50 Crore as submitted by RInfra-D.

#### **4.12 CONTRIBUTION TO CONTINGENCY RESERVES**

RInfra-D submitted that the contribution to contingency reserves for FY 2008-09 has been computed at 0.25% of opening GFA in accordance with the APR Order dated June 15, 2009, which works out to be Rs. 6.5 Crore. RInfra-D submitted that the required Contingency Reserve investment for RInfra-D was Rs. 21.36 Crore as on April 1, 2008. RInfra-D contributed Rs. 6.5 Crore to contingency reserve during FY 2008-09 and thus, the total contribution at end of FY 2008-09 amounts to Rs. 27.86 Crore. RInfra-D submitted that it continues to maintain Contingency Reserve investments of Rs.114.74 Crore in the authorized securities. RInfra-D also submitted documentary evidence that the amount appropriated under contingency reserve has been invested in securities authorized under the Indian Trusts Act, 1882.

The Commission has considered the revised Opening GFA for FY 2008-09 for reasons mentioned in earlier sections of this Order. Thus, the Commission has considered the contribution to contingency reserves at 0.25% of the revised opening GFA for FY 2008-09, and has allowed Rs. 6.48 Crore as contribution to contingency reserve.

#### **4.13 INCOME TAX**

RInfra-D, in its Petition, submitted that the income tax liability of RInfra-D for FY 2008-09 is Rs. 121 Crore, as against the income tax of Rs. 46.32 Crore approved in the APR Order. RInfra-D submitted that the Income Tax computation has been done in accordance with the provisions of Income Tax Act and the income tax payable at the corporate tax rate of 33.99% (30% tax, 10% surcharge, and 3% education cess on tax and surcharge). RInfra-D added that the Income Tax has been computed based on the methodology outlined by the Commission in its Order dated June 4, 2008, wherein the normative interest on long-term loans and normative interest on working capital have not been considered as deductible expenses while computing the Income Tax.

RInfra-D submitted that the Commission in its Order dated June 15, 2009, did not gross up RoE by the tax rate to compute Income Tax. RInfra-D has appealed against this approach in Appeal No. 150 of 2009. Pending the outcome of the said appeal, RInfra-D has computed Income Tax for all three financial years after grossing up regulated RoE by Income Tax Rate. RInfra-D added that the Income Tax is a component of allowed revenue, and that being so, it will also attract income tax. Hence, unless income tax is permitted on such component of revenue, there will be under-recovery of Regulated Return.

In response to the Commission's query regarding income tax refund for previous years, RInfra-D submitted that the income tax refund primarily arises due to the difference between income tax provided based on the computations done by the Company and the final assessment and may include issues for earlier years, which are pending under review at different levels of assessment, Appellate, etc. RInfra-D added that since, the computation of tax for Regulated Business is done in accordance with the MERC Tariff Regulations, 2005 and is taken accordingly in the ARR/APR, therefore, refund received/additional charge made, if any, at the Company level will not impact computation submitted for the purposes of determination of APR/ARR.

As mentioned above, RInfra-D has appealed against the Commission's approach of considering RoE as the regulatory profit before tax and not grossing up by the income tax rate, for the

purpose of income tax computations, in Appeal No. 150 of 2009. Although the ATE Judgment on RInfra-D's appeal is pending, the ATE has issued its Judgment on the same subject in various other appeals wherein this Commission is a party and the Judgment has been made with regards to the MERC Tariff Regulations, 2005.

The ATE, in its Judgment in Appeal No. 174 of 2009 filed by TPC-T, ruled as under:

*“10. In the light of the above submissions, we will now discuss this issue.*

*11. The issue of income tax relates to the fact that the State Commission deals with regulatory accounts of each licensed business. **The State Commission is required to adjust the regulatory accounts' income to the taxation accounts. This could be done in 2 alternative methods. One by Profit Before Tax method and second by the method of Return on Equity. Profit Before Tax method is followed while truing up as details of all the elements are available by then. The second method is followed while submitting the details for APR or for tariff determination, as all adjustment details are not available at the point of submission. Therefore, for truing up, the Appellant has estimated the income tax liability by using the first method.** While the State Commission has attempted to follow the first method, it has wrongly taken Return on Equity as profit before tax instead of computing the regulatory profit before tax by the method of revenue – permissible expenses. The difference in starting point itself is Rs. 35 crores. If the State Commission wanted to start with Return on Equity, then it must have added the incentives and efficiency gains and grossed it up for tax to arrive at base income. Instead the State Commission has done neither but has ended up with hybrid of the two.*

....

*17. The State Commission considered the Return on Equity as Profit Before Tax for the purpose of income tax. Such computation is based on working out tax which disregards annual income arising from incentives and efficiency gains. The Regulations of the State Commission envisage reimbursement of actual income tax. Therefore, it is to be concluded that the deviation made by the State Commission is without any reason, thereby denying the rightful entitlement of income tax.*

*18. While the State Commission has computed the tax by considering the Return on Equity equal to profit before tax, it has ignored the fact that such allowed income tax would also be considered as revenue gains and the Appellant would have to pay tax on the same. In order to rectify the same, the State Commission ought to have grossed up the*

*tax computed by it and pass the same to the Appellant. Thus the claim of the State Commission that it has reimbursed the actual tax and hence there is no case for allowing post tax Return on Equity is not correct. **Therefore, it would be appropriate to direct the State Commission to compute income tax entitlement of the Appellant by replacing Return on Equity by regulatory profit before tax on the basis of income less permissible expenses. Accordingly ordered***” (emphasis added)

The ATE, in its Judgment in Appeal No. 173 of 2009 in appeal by TPC-G, ruled as under:

*“31. The next issue is wrongful treatment of Income Tax. According to the Appellant, the State Commission has to implement the mandate of the Regulation 34 of the State Commission’s Tariff Regulations 2005. The mandate is that ‘the State Commission is required to adjust the regulatory accounts’ profit (income minus permissible expense) to the taxable profits. This has to be done in the following manner:*

- (i) Start from regulatory profit before tax computed as Revenue – permissible expenses.*
- (ii) Adjust this for normative interest/regulatory depreciation etc. to arrive at book profit before tax.*
- (iii) This is further adjusted for various tax disallowances/exemptions/deductions under the Income Tax Act, 1961.*
- (iv) The resultant figure is the taxable income on which tax is to be paid.*
- (v) Current tax rate is applied on the taxable income to arrive at the tax entitlement.*

*32. The State Commission has attempted to follow the Profit Before Tax method instead of computing Regulatory Profit Before Tax by the traditional method of revenue, - permissible expenses. By this method the State Commission has taken return on equity as Profit Before Tax.*

....

*37. In view of the above, the State Commission’s conclusion, in our view, may not be correct and therefore, the State Commission is directed to compute the income tax entitlement of the Appellant by replacing Return on Equity by Regulatory Profit Before Tax i.e. income less permissible expenses. This point is answered accordingly.”*

Further, the ATE, in its Judgment dated January 05, 2011 on the Review Petition No. 09 of 2010 filed by the Gujarat Electricity Regulatory Commission (GERC) in Appeal No. 68 of 2009, has allowed grossing up for computation of income tax and also ruled that the Utility should neither

benefit nor lose on account of income tax claim. The relevant extract of the said Judgment is quoted below:

“13...

*The Tribunal has also held in the judgment that the Appellant, Torrent Power Limited should neither benefit nor loose on account of tax payable which is a pass through in the tariff. Thus, there is no question of the generating company making profit on account of income tax. The excess recovery of income tax if any has to be reimbursed by the generating company to the distribution company as per the Regulations of the State Commission. In this case the excess recovery of income tax if any has to be adjusted in the true up of the financials.”*

In the above Judgments, the ATE has ruled that the RoE considered as starting point for income tax computation by the Commission should be replaced by regulatory profit before tax. The ATE has further clarified that the Profit Before Tax method for computation of income tax should be followed in case of truing up, as actual income and expenditure details are available, while, the second method of computation, using RoE as base, should be followed while computing the income tax for APR or estimating the ARR for the future year, as the actual data is not available. The ATE has clarified in case the RoE is used as the base, then the incentive income and income from efficiency gains should be added to the RoE and the same should be grossed up by the income tax rate, to determine the Profit Before Tax, and the income tax should be computed on this amount. The ATE has also clarified that the Utility should neither lose nor make profit on account of Income Tax. However, in this case, RInfra-D has submitted that the income tax considered for tariff purposes has to be computed strictly as per the MERC Tariff Regulations, without any reference to the actual income tax paid by RInfra-D and in the context of the income tax refund received by RInfra-D, has submitted that refund received/additional charge made, if any, at the Company level will not impact computation submitted for the purposes of determination of APR/ARR. It may be noted that the requirement of assessment of income tax payable by RInfra-D is arising because of the integrated nature of its operations and the common Balance Sheet of the Company, which makes it difficult to identify the actual income tax paid/payable by the licensee for the business relating to electricity distribution in its area of supply in thMumbai suburbs.

Accordingly, the Commission has considered the Profit Before Tax method for computation of income tax after truing up of FY 2008-09 and the RoE method for computation of income tax under provisional truing up of FY 2009-10 and determination of ARR for FY 2010-11. Further,

the Commission, while determining the income tax for FY 2008-09 has adopted the method explained in ATE Judgment in Appeal No. 173 of 2009, as extracted above. Incorporating the directives of the ATE, the Commission has replaced RoE by regulatory Profit Before Tax computed as income less permissible expenses. Based on the above principles, the Commission has estimated the taxable income for FY 2008-09 as Rs. (501.18) Crore on standalone basis for RInfra-D, thus, the income tax liability is nil. It may be noted that in Section 4.19 of this Order, the revenue gap for FY 2008-09 after final truing up has been determined as Rs. 775.70 Crore. The difference between these two values, viz., Rs. 775.70 Crore and Rs. 501.18 Crore is on account of RoE, Contribution to contingency reserve and adjustments made to profit before tax for computation of income tax.

It may be noted that in case of RInfra-D, although the profit before tax for FY 2008-09 is negative and the income tax payable is nil in the current scenario, in future, when RInfra-D recovers the regulatory assets and past revenue gap, the revenue in those years will be higher and the income tax payable will be correspondingly higher.

The summary of the income tax approved by the Commission for FY 2008-09 is shown in the following Table:

**Table: Income Tax (Rs Crore)**

Particulars	FY 2008-09		
	APR Order	Actuals	Allowed after truing up
Profit Before Tax	168.49	189.68	(542.82)
Add: Depreciation as per APR	72.12	109.64	99.72
Less: Depreciation as per Income Tax	-167.02	-185.99	-185.99
Add: Normative Interest on Long Term Loan	62.70	79.14	77.17
Add: Normative Interest on Working Capital	-	65.96	50.74
Total Profit	136.28	356.10	(501.18)
Income Tax on Total Profit	46.32	121.04	-



#### 4.14 RETURN ON EQUITY (ROE)

The Commission, in its APR Order, has approved RoE of Rs. 151.43 Crore towards Wire Business and Rs. 17.06 Crore towards Retail Supply Business for FY 2008-09. RInfra-D has computed RoE at 16% on the regulatory equity at the beginning of the year and on 50% of equity capitalization during the year. Consumer contributions have been adjusted while considering capitalization for the purpose of determining normative equity. Accordingly, RInfra-D in its Petition has claimed total RoE of Rs. 189.70 Crore for FY 2008-09.

The Commission has computed the RoE for FY 2008-09 on the opening balance of equity and 50% of the equity portion of the approved asset capitalisation during the year, in accordance with the MERC Tariff Regulations as applicable for the Distribution business. Further, the Commission has considered net capitalization, adjusted for Consumer contribution for the purpose of determining normative equity. The summary of RoE projected by RInfra-D and approved by the Commission for FY 2008-09 is summarised in the following Table:

**Table: Return on Equity for FY 2008-09 (Wire and Supply business) (Rs. Crore)**

Particulars	FY 2008-09		
	APR Order	Actuals	Allowed after truing up
Regulated Equity at beginning of year	1031.19	1119.11	1118.44
Equity Portion of Capitalised Expenditure	43.75	132.78	112.76
Reg. Equity at the end of the year	1074.93	1251.88	1231.21
Return on Reg. Equity at beginning of year	164.99	179.06	178.95
Return on Equity Portion of Capital Expenditure Capitalised	3.50	10.62	9.02
<b>Total Return on Regulated Equity</b>	<b>168.49</b>	<b>189.68</b>	<b>187.97</b>

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

Particulars	FY 2008-09		
	APR Order	Actuals	Allowed after truing up
Regulated Equity at beginning of year	924.58	1001.99	1001.32
Equity Portion of Capitalised Expenditure	43.75	118.05	112.59
Reg. Equity at the end of the year	968.32	1120.04	1113.91

Particulars	FY 2008-09		
	APR Order	Actuals	Allowed after truing up
Return on Reg. Equity at beginning of year	147.93	160.32	160.21
Return on Equity Portion of Capital Expenditure Capitalised	3.50	9.44	9.01
<b>Total Return on Regulated Equity</b>	<b>151.43</b>	<b>169.76</b>	<b>169.22</b>

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

Particulars	FY 2008-09		
	APR Order	Actuals	Allowed after truing up
Regulated Equity at beginning of year	106.61	117.12	117.12
Equity Portion of Capitalised Expenditure	0.00	14.72	0.17
Reg. Equity at the end of the year	106.61	131.84	117.29
Return on Reg. Equity at beginning of year	17.06	18.74	18.74
Return on Equity Portion of Capital Expenditure Capitalised	0.00	1.18	0.01
<b>Total Return on Regulated Equity</b>	<b>17.06</b>	<b>19.92</b>	<b>18.75</b>

#### 4.15 NON TARIFF INCOME

RInfra-D submitted that the actual non-tariff income for FY 2008-09 is higher at Rs. 141.60 Crore as against Rs 129.22 Crore approved by the Commission in its APR Order dated June 15, 2009.

In reply to the query raised by the Commission, RInfra-D submitted the details of other/miscellaneous receipts forming a part of non-tariff income as under:

Miscellaneous Receipts	2008-09
	(in Rs Cr)
Income from replacement of Burnt meters	1.08
Street light maintenance Charge (including past arrears)	85.94
Liquidated Damages charges	7.16
Advertisement on Bills	0.50
Others	0.13
<b>Total Miscellaneous</b>	<b>94.80</b>

RInfra-D added that Streetlight maintenance charges and Liquidated Damages are of recurring nature.

The Commission observed that RInfra-D has not included interest on arrears in the computation of Non-Tariff Income. In the APR Order dated June 15, 2009, the Commission has considered Interest on Arrears under Non-Tariff Income for the purpose of truing up, which has not been considered by RInfra-D in its submission.

In reply to datagaps, RInfra-D has submitted interest on delayed payment as Rs. 6.68 Crore for FY 2008-09. Hence, the Commission has considered Rs 6.68 Crore towards interest on delayed payment under non tariff income, whereby the total non-tariff income for FY 2008-09 of RInfra-D works out to Rs. 148.27 Crore, as compared to the non-tariff income of Rs. 141.60 Crore reported by RInfra-D. The summary of Non tariff income as allowed by the Commission is below:

*Table: Non-Tariff Income (Rs Crore)*

Particulars	APR Order	Actuals	Allowed after truing up
Non-Tariff Income	129.22	141.60	148.27

#### **4.16 REVENUE FROM SALE OF ELECTRICITY FOR FY 2008-09**

RInfra-D submitted that the actual revenue for distribution business amounts to Rs. 5344 Crore, however, the Commission had approved revenue of Rs. 5309.15 Crore for FY 2008-09 by extrapolating 11 months actual revenue from April 2008 to February 2009. It includes power factor and load factor rebate/penalties and ECS and prompt payment discounts. Further, RInfra-D added that Tax on Sale of Electricity (TOSE) has not been considered as part of ARR or Revenue as it has been passed through at actuals, in accordance with the prevailing practice.

*Table: RInfra-D's Sales Revenue in FY 2008-09 (Rs. Crore)*

Sl.	Particulars	APR Order	Actuals
1	Revenue	5309.15	5344.08

The actual revenue from sale of electricity in FY 2008-09 has been considered under the truing up exercise.

#### **4.17 SHARING OF GAINS AND LOSSES IN FY 2008-09**

RInfra-D categorised all the expenditure as uncontrollable and hence, did not compute the gains and losses for the controllable expenditure.

The relevant provisions under the MERC Tariff Regulations stipulating sharing of gains/losses due to controllable factors are reproduced below:

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

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

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

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

*(d) Variations in working capital requirements;*

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

*(f) Variations in labour productivity;*

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

...

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

*(a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be specified in the Order of the Commission under Regulation 17.10;*

*(b) In case of a Licensee, one-third of the amount of such gain shall be retained in a special reserve for the purpose of absorbing the impact of any future losses on account of controllable factors under clause (b) of Regulation 19.2; and*

*(c) The balance amount of gain may be utilized at the discretion of the Generating Company or Licensee.*

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

*(a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be specified in the Order of the Commission under Regulation 17.10; and*

*(b) The balance amount of loss shall be absorbed by the Generating Company or Licensee.”*

The Commission has considered the performance parameters and expenses for computing the sharing of gains/losses in accordance with the provisions of Tariff Regulations, as elaborated below:

#### **4.17.1 Operation & Maintenance Expenses**

The actual O&M expense for FY 2008-09 as approved by the Commission after final true-up is Rs. 540.52 Crore as against earlier approved expense of Rs. 532.24 Crore and the actual expenditure of Rs. 548.15 Crore as submitted by RInfra-D.

In case of employee expenses, the Commission has computed the efficiency losses as Rs. 7.63 crore, since the actual expenses have been higher than the levels approved in this Order, and the same has been shared in the proportion specified under the MERC Tariff Regulations. As regards A&G expenditure, the actual expenditure has been higher than that considered in the Order, which has been allowed as RInfra-D's submissions that the increase has been due to uncontrollable factors has been accepted. Hence, there is no sharing of gain/loss on these heads of expenditure. On the other hand, there is an efficiency gain of Rs. 4.67 Crore, on account of R&M expenses, which has been shared between the consumers and RInfra-D in the proportion specified under the MERC Tariff Regulations.

#### **4.17.2 Interest on Working Capital**

By virtue of the above provision in the MERC Tariff Regulations, it follows that if the actual working capital requirement is higher/lower than the normative level of working capital, then the difference between the actual working capital requirement and the normative working capital requirement will have to be treated as an efficiency loss/gain as the case may be.

For FY 2006-07, FY 2007-08, FY 2008-09 and FY 2009-10, the Commission asked RInfra-D to provide clarity regarding whether the working capital requirement has been met from the cash flows of RInfra-D and/or cash flows from any other business. Further, RInfra was also asked to submit the cash flow statement indicating as to how the working capital requirement has been

met for RInfra-D business. In addition, the source and cost of such funds with appropriate justification was sought from RInfra-D.

In response to the above queries raised by the Commission, RInfra-D only submitted that the entitlement as sought in respect of Interest on Working Capital may be allowed in view of the various Judgments made by ATE in this regard and quoted few extracts of the ATE Judgments in Appeal No. 111 of 2008 (filed by RInfra-G), Appeal No. 115 of 2008 (filed by RInfra-T) and Appeal No. 117 of 2008 (filed by RInfra-D). However, no information or justification as sought by the Commission was submitted by RInfra-D.

From the above responses of RInfra-D, it is observed that RInfra-D has not been able to satisfactorily address the Commission's queries and that there is no substantiation of the actual working capital interest on funds used for meeting working capital requirement, for FY 2008-09. The Commission is of the view that by implication, RInfra-D has managed to meet its working capital requirements by its own operational efficiency for FY 2008-09, and has minimised the working capital requirement itself, and has not actually relied on any funds to meet its working capital requirement. Hence, the Commission has allowed the entire working capital interest on normative basis in accordance with the MERC Tariff Regulations. Further, as per Regulation 17.6.2 (d) of the MERC (Terms and Conditions of Tariff) Regulations, 2005, variation in working capital requirement is a controllable factor, and hence, the Commission rules that the entire normative working capital interest has to be considered as an efficiency gain, and the sharing of gains has to be computed in accordance with Regulation 19.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005. However, the same is subject to the Judgment of the Hon'ble Appellate Tribunal on the Appeal filed by TPC-D on the same issue in the context of the Tariff Order issued by the Commission for TPC-D dated September 12, 2010, which is presently pending before the Hon'ble Appellate Tribunal.

The normative interest on working capital approved by the Commission considering other elements of expenses as approved after truing up, works out to Rs 50.74 Crore, which has been considered as an efficiency gain and shared between the licensee and the consumers.

#### **4.17.3 Efficiency Gain/Loss due to Distribution Loss**

RInfra-D submitted that the Appellate Tribunal of Electricity (ATE), in its Judgment dated December 11, 2007 stated that the loss levels targets during FY 2007-08 should be retained at

12.10% and the loss level targets for FY 2008-09 and FY 2009-10 should be reviewed by the MERC. The relevant extract is quoted under:

*“23. Considering that the losses must be reduced further and keeping in mind the practical difficulties regarding the mechanical meters and theft of electricity in unorganized areas, till such time the technical studies are carried out, the target of losses during the year 2007-08 be retained at the level of 12.1% as proposed by the appellant in its petition. We also direct the Commission that after installation of electrostatic meters in place of mechanical meters and availability of technical study report, it should review the loss level target for the year 2008-09 and 2009-2010.”*

Hence, RInfra-D submitted that the target loss level for FY 2008-09 for the purpose of computing efficiency gains should be considered as 11.85% based on 0.25% reduction from FY 2007-08 target loss level of 12.10% as ruled by the ATE in its abovementioned Order. Accordingly, the efficiency gains for FY 2008-09 as computed by RInfra-D is as under:

**Table: Efficiency Gains due to lower Distribution Loss for FY 2008-09**

Sl. No.	Particulars	UoM	Actuals	Target level
A	Sales	MU	8,270	8,115
B	Distribution Loss	%	10.16%	11.85%
C	Energy Input to the Distribution System	MU	9206	9206
D	Intra State Transmission System Losses	%	4.86%	4.86%
E	Energy Input	MU	9676	9676
F	Increase / (decrease) in sales	MU		156
G	ABR - FY 2008-09	Rs/kW h		6.46
H	Efficiency Gains / (Losses)	Rs. Crore		100.53
I	Incentive passed on to RInfra-D	Rs. Crore		67.02
J	Incentive shared with consumers	Rs. Crore		33.51

RInfra-D added that it has shared benefits with the consumers on account of reduction in Distribution Losses to 10.16% from target level of 11.85%. The reduction in distribution losses has resulted in efficiency gains of Rs. 100.5 Crore.

As discussed in Section 3 of this Order, the Commission has clearly enunciated its views as regards the distribution loss norm to be considered for RInfra-D for FY 2008-09 in the APR Order for FY 2007-08 dated June 4, 2008, and the Commission has considered the distribution loss target as 10.75% for FY 2008-09. Accordingly, the Commission has estimated the efficiency loss on account of distribution loss by considering the normative level as 10.75% for FY 2008-09, as shown in the Table below:

#### Efficiency Gains on account of Distribution Loss for FY 2008-09

Particulars	UoM	2008-09	
		Distribution loss at 10.75%	Distribution loss at 10.16%
Sales	MU	8216	8270
Distribution Loss	%	10.75%	10.16%
Energy Input to the Distribution System	MU	9206	9206
Intra State Transmission System Losses	%	4.86%	4.86%
Energy Input	MU	9676	9676
<b>Increase/(decrease) in sales</b>	<b>MU</b>		<b>54</b>
<b>Efficiency Gains/(Losses) @ 6.46/unit ABR</b>	<b>Rs. Crore</b>		<b>35.09</b>

#### 4.18 AGGREGATE REVENUE REQUIREMENT IN FY 2008-09

The summary of the net ARR approved by the Commission for FY 2008-09 after final truing up is given in the following Table:

S. No.	Particulars	Approved	Actual	Allowed after truing up	Efficiency Gain/(Loss)	Efficiency Gain/(Loss) shared with consumers	Net Entitlement before passing on to reserves
<b>A</b>	<b>Expenditure</b>						
1	Power Purchase Expenses	4,956.22	5,057.42	5,059.42			5,059.42
2	Operation & Maintenance Expenses	532.24	548.15	540.52			546.18



S. No	Particulars	Approved	Actual	Allowed after truing up	Efficiency Gain/(Loss)	Efficiency Gain/(Loss) shared with consumers	Net Entitlement before passing on to reserves
2.1	Employee Expenses	285.73	298.81	291.18	-7.63	-2.54	293.72
2.2	Administration & General Expenses	105.36	112.88	112.88			112.88
2.3	Repair & Maintenance Expenses	141.14	136.47	136.47	4.67	1.56	139.58
3	Depreciation, including advance against depreciation	72.12	109.64	99.72			99.72
4	Interest on Long-term Loan Capital	62.69	79.14	77.17			77.17
5	Interest on Working Capital and on consumer security deposits	47.69	65.96	65.86	50.74	16.91	48.94
6	Bad Debts Written off	5.00	2.50	2.50			2.50
7	Other Expenses		0.00	0.00			0.00
8	Income Tax	46.32	121.04	0.00			0.00
9	Transmission Charges paid to Transmission Licensee	221.63	216.28	216.28			216.28
10	Contribution to contingency reserves	6.07	6.49	6.48			6.48
	<b>Total Expenditure</b>	<b>5,949.99</b>	<b>6,206.62</b>	<b>6,067.94</b>			<b>6,056.69</b>
	Add: Efficiency Gains for distribution loss reduction	0	67.02		35.09	11.70	23.39
<b>B</b>	<b>Return on Equity</b>	168.49	189.68	187.97			187.97
	<b>Aggregate Revenue Requirement</b>	6,118.48	6,463.32	<b>6,255.92</b>			6,268.05
<b>C</b>	<b>Revenue</b>						
1	Revenue from sale of electricity	5,309.15	5,344.08	5,344.08			5,344.08
2	Other Income	129.22	141.59	148.27			148.27
<b>D</b>	<b>Gap</b>	680.11	977.65	763.57			775.70
	<b>Truing up Gap</b>		<b>297.54</b>	83.46			95.60

#### **4.19 REVENUE GAP**

RInfra-D submitted that the revenue gap in FY 2008-09 was equal to the difference between the revenue earned and the actual ARR, i.e., Rs. 977.65 Crore. The Commission has re-computed the revenue gap, by considering the ARR approved under the truing up exercise, and the revenue income considered by the Commission, including non-tariff income. Further, the Commission has also considered the sharing of gains and losses due to controllable factors, as discussed in earlier paragraphs, while determining the revenue requirement of RInfra-D for FY 2008-09. Thus, the additional revenue gap after final truing up for FY 2008-09 works out to Rs. 95.60 Crore, which has been added to the ARR of FY 2010-11, as discussed in the subsequent Section.

## **5 PERFORMANCE REVIEW OF FY 2009-10 AND DETERMINATION OF AGGREGATE REVENUE REQUIREMENT FOR FY 2010-11**

### **5.1 PERFORMANCE PARAMETERS**

Regulation 16.1 of the MERC (Terms and Conditions of Tariff) Regulations, 2005, stipulates,

*“The Commission may stipulate a trajectory, which may cover one or more control periods, for certain variables having regard to the reorganization, restructuring and development of the electricity industry in the State.*

*Provided that the variables for which a trajectory may be stipulated include, but are not limited to, generating station availability, station heat rate, transmission losses, distribution losses and collection efficiency.”*

#### **5.1.1 Distribution Loss**

For FY 2009-10, the Commission specified the target distribution loss level as 10.50% in the APR Order for RInfra-D dated June 15, 2009 in Case No. 121 of 2008, by considering a target loss reduction of 0.25% over the target loss level for FY 2008-09 (10.75%), after considering the benefits of capital expenditure being undertaken by RInfra-D, as projected by RInfra-D.

RInfra-D submitted that the actual distribution loss in FY 2009-10 was 10.08%, which has been considered for computing the energy input requirement. RInfra-D added that the distribution loss have been measured between input to RInfra-D’s distribution system and output, where input means all energy as measured at T< >D interface points and accounted for by MSLDC and output means the sales of RInfra-D’s consumers and change-over consumers put together. Further, RInfra-D added that wheeling losses of 9% and 1.5% have been considered for LT and HT change-over consumers, respectively. RInfra-D submitted that the distribution losses as measured between sales and corresponding purchase (after netting off total T< >D energy by change-over grossed up sales) will be different. These additional losses and corresponding energy to meet the difference between wheeling losses and actual losses is procured by RInfra-D at marginal rate. RInfra-D added that the actual transmission loss from MSLDC monthly IBSM statements is 4.56% for FY 2009-10. RInfra-D estimated that for FY 2010-11, the total distribution system losses would remain at about 10.25% and transmission losses are assumed at

4.85%. The summary energy balance for RInfra-D system as a whole is as given below, considering all input and all output:

**Table: Summary of Energy Balance as submitted by RInfra-D**

Particulars	FY 2009-10	FY 2010-11
Energy sold (MU) (RInfra-D)	8320.01	7,874.68
Energy sold (MU) – Change-over	207.80	1,278.49
Distribution loss %	10.08%	10.25%
T-D Energy input (MU)	9483.88	10198.52

RInfra-D added that the above energy balance considers all energy entering and exiting the system of RInfra-D, notwithstanding that some portion of it is supplied by TPC-D to changeover consumers. From this total energy input, energy supplied by TPC-D to change-over consumers will have to be removed to determine the power purchase quantum and cost of RInfra-D for FY 2009-10 and FY 2010-11. Therefore, the actual power purchase by RInfra-D for FY 2010-11 is 9,708 MU and the Energy Balance is shown in the table below:

**Table: Summary of Sale – Purchase balance submitted by RInfra-D**

Particulars	Notation	FY 2009-10
Energy sold by RInfra-D (MU)	A	8320.01
T-D Energy attributable to RInfra-D as per SLDC statements	B	9264.92
Losses %	$C = A - B$	10.20%
InSTS losses %	D	4.56%
<b>Power Purchase by RInfra-D (MU)</b>	<b><math>E = B / (1-D)</math></b>	<b>9707.80</b>

RInfra-D submitted that the losses in RInfra-D system as measured through sale - purchase method are 10.20%, as against 10.08% when measured through input-output method. Therefore, RInfra-D requested the Commission to consider 10.08% as distribution system losses for the purpose of comparison with target losses and determination of efficiency gains. RInfra-D added that the difference w.r.t. sale-purchase method is arising purely because of change-over

consumers since, the applied wheeling losses are 9% (at LT) and 1.5% (at HT). Thus, the difference is being unjustly borne by RInfra-D consumers. Given below is the Energy Balance and Power to be purchased by RInfra-D during FY 2010-11, based on approved change-over sales and projected own sales of RInfra:

**Table: Projected energy requirement submitted by RInfra-D for FY 2010-11**

Particulars	Notation	FY 2010-11
Projected Energy Sales (MU) – RInfra-D	A	7875
Projected Change-over sales (MU)	B	1278
Total Projected Distribution System Losses %	C	10.25%
<b>Total Energy requirement projected at T-D Interface Points (MU)</b>	<b>D = (A+B)/(1-C)</b>	10199

**Table: Power Purchase by RInfra-D during FY 2010-11**

Particulars	Notation	FY 2010-11
Migrated HT sale (MU)	A	525
HT Wheeling Losses %	B	1.5%
HT grossed up energy at T-D boundary (MU)	$C = A/(1-B)$	533
Migrated LT sale (MU)	D	753
LT loss %	E	9%
LT grossed up energy at T-D boundary (MU)	$F = D/(1-E)$	828
Total T-D energy for change-over consumers (MU)	$G = C+F$	1,361
Total projected Energy recorded at T-D Interface (MU)	H (From table above)	10199
Net Energy attributable to RInfra-D at T-D interface points (MU)	$J = H - G$	8,838
Projected InSTS losses %	K	4.85%
<b>Total power purchase requirement of RInfra-D (MU)</b>	<b><math>L = J / (1-K)^*</math></b>	9,288

**Note:** Mentioned as  $L = K/(1-J)$  in RInfra-D's APR Petition, though calculation is correct

RInfra-D has challenged the Commission's Order on wheeling losses of 9% at LT level before the ATE in Appeal No. 150 of 2009. RInfra-D submitted that the computations of power purchase requirement have been done by considering 9% LT wheeling loss, pending the ATE's decision in this regard. RInfra-D emphasized that the approach of permitting change-over (open access) consumers to bear only technical losses (9% or 1.5%, as the case may be) is against the principle of non-discriminatory open access as envisaged in the Electricity Act 2003 (EA 2003). All consumers whether self supplied or on Open Access, use the same services and infrastructure of the wheeling licensee (except for consumers opting for change of meters during change-over) and hence, the incidence of system losses should be identical for all consumers using the network services, whether self supplied or supplied by other licensee. RInfra-D added that having considered HT losses at 1.5%, the losses of LT system should be prescribed at a higher level than 9%, so that the total system losses are as per the overall energy balance, and thus equitably applicable to all users of the system. RInfra-D computed the losses that should be applicable for LT system in order for the system losses of FY 2009-10 and FY 2010-11 to be as per the Energy Balance drawn above. RInfra-D submitted tables to indicate the impact of additional power purchase that have impacted or will impact RInfra-D's consumers in FY2009-10 or FY 2010-11, respectively, if the same losses are not applied to wheeling and own consumers.

The Commission, in the Tariff Order dated June 15, 2009 in Case No. 121 of 2008 had approved distribution loss of 10.50% and transmission loss of 4.85% for FY 2009-10. In this Order, for provisional truing up, the Commission has considered the actual distribution loss of 10.20% based on the actual sales and power purchase quantum submitted by RInfra-D for FY 2009-10 and transmission loss of 4.56% for FY 2009-10 as submitted by RInfra-D. The Commission will consider actual distribution loss at the time of final truing up, subject to prudence check. Any sharing of gains or losses due to better/poorer performance of RInfra-D as regards this controllable parameter will be undertaken at the time of final truing up for FY 2009-10.

For FY 2010-11, the Commission has obtained the details of actual category-wise sales and actual source-wise power purchase for the ten-month period from April 2010 to January 2011 from RInfra-D. The Commission has considered the normative distribution loss of 10.25% for RInfra-D for projection purposes. In the APR Order for RInfra-D dated June 4, 2008 in Case No. 66 of 2007, the Commission has specified the distribution loss levels as 10.75% for FY 2008-09 by considering a target loss reduction of 0.25% over the target loss level for FY 2007-08 (11%). Following the same loss reduction trajectory, target distribution loss for FY 2010-11 stands at

10.25%. The Commission will consider actual distribution loss at the time of final truing up, subject to prudence check. Any sharing of gains or losses due to better/poorer performance of RInfra-D as regards this controllable parameter will be undertaken at the time of final truing up for FY 2010-11.

As regards the applicable wheeling losses of 9% at LT level, RInfra-D has challenged the Commission's Order before the Hon'ble ATE in Appeal No. 150 of 2009 and the ATE Judgment is still awaited. In light of the pending appeal, the Commission is not inclined to give any findings or further directions at this stage in relation to the same.

## **5.2 PROVISIONAL TRUING-UP FOR FY 2009-10**

RInfra-D, in its present APR Petition for FY 2009-10 and ARR Petition for FY 2010-11, submitted the performance for FY 2009-10 based on actual performance for FY 2009-10. RInfra-D submitted the comparison of each element of expenditure and revenue with that approved by the Commission in its Order dated June 15, 2009 on RInfra-D's APR for FY 2008-09 and tariff determination for FY 2009-10.

RInfra-D submitted that FY 2009-10 is over and actual data is available, hence, there is no point in carrying out provisional truing-up for FY 2009-10. RInfra-D submitted that it has submitted all actual data for FY 2009-10 in the Petition. RInfra-D further submitted that due to certain pending operational issues, the statutory audit of FY 2009-10 numbers is not over yet, however, the financials will not undergo any change at the time of statutory audit.

The Commission has undertaken provisional truing-up for FY 2009-10 in order to keep all the distribution licensees at par in terms of the regulatory process. As far as possible, actuals provided have been considered subject to prudence check, only the reconciliation with audited accounts and sharing of efficiency losses/gains will be undertaken at the time of final truing up. The revised estimate of performance of RInfra-D during FY 2009-10 and FY 2010-11 is discussed in the following paragraphs.

The Commission clarifies that the final truing up and the computation of sharing of gains and losses due to controllable factors will be undertaken only after the audited expenses and revenue are available.

### 5.3 SALES

RInfra-D submitted that pursuant to the Hon'ble Supreme Court's Judgment dated July 08, 2008, the Tata Power Company Limited (TPC) is entitled to provide supply to retail consumers in Mumbai. In the absence of a well defined operating procedure to enable the migration of consumers from RInfra-D to TPC, the migration was not practically possible till the Commission set out an interim operating procedure vide its Order dated October 15, 2009 in Case No. 50 of 2009. Therefore, the impact of migration of consumers and energy sales is visible in the H2 of FY 2009-10 and further in FY 2010-11.

RInfra-D submitted that it has considered the actual energy sold to each category of consumer for FY 2009-10. RInfra-D provided the actual energy as sold by TPC-D to migrated consumers as accounted by MSLDC in its IBSM statements and also the actual energy sold to each category of consumer of RInfra-D for FY 2009-10 as shown in the table below:

**Table: Energy Sales submitted by RInfra-D for FY 2009-10**

<b>Consumer Category</b>	<b>Own Sales</b>	<b>Migrated sales</b>	<b>Total Sales</b>
<b>LT Category</b>			
Below Poverty Line (BPL)	0		0
LT I (Residential)	4,439	13	4,452
LT Commercial	2,173	49	2,222
LT III (below 20 kW load)	160	3	163
LT IV (above 20 kW load)	491	30	521
LTIX (Agriculture)	0		0
LT VI (Street Light)	55		55
LT VII (Temporary) Others	95	0	95
LT VII (Temporary) Religious	1	0	1
LT V (Advt & Hoardings)	3		3
LT VIII (Crematorium)	1		1
<b>LT Total</b>	<b>7,419</b>	<b>96</b>	<b>7,514</b>
<b>HT Category</b>			
HT I (Industrial)	313	23	337
HT II (Commercial)	544	86	631
HT III (Housing)	34	2	36
HT Temporary	10	0	10
<b>HT Total</b>	<b>901</b>	<b>112</b>	<b>1,014</b>
<b>Total Sales</b>	<b>8,320</b>	<b>208</b>	<b>8,528</b>



RInfra-D submitted that the Commission, in its Order dated September 12, 2010 in Case No. 98 of 2009 for TPC-D, has considered 200 MU as energy sold to change-over consumers by TPC-D during FY 2009-10. However, MSLDC in its IBSM statements has considered 218.96 MU as energy sold to change-over consumers, which amounts to 207.80 MU at consumer level. RInfra-D added that both TPC-D and RInfra-D have agreed to the energy sold to change-over consumers as included in MSLDC statements. Thus, RInfra-D requested the Commission to consider 207.80 MU as sales to change-over consumers (at consumer level) during FY 2009-10.

For FY 2010-11, RInfra-D submitted that in the past, sales were forecasted for the ensuing year by extrapolating historical trends. An appropriate growth rate namely 5-year CAGR/ 3-year CAGR/ annual growth rate was applied over previous year sales to forecast the sales for ensuing year. This method provided forecast with reasonable accuracy in the monopolistic supply situation prevalent in the past. However, due to migration of existing consumers to TPC-D for supply, an appropriate correction is required to be applied to the forecast to factor in the effect of migration. Therefore, RInfra-D has adopted the approach of first developing a Base Case sales forecast for FY 2010-11 (i.e., what the sale would be in FY 2010-11 if there was no changeover). Subsequently, the Base Case forecast has been moderated to include the effect of consumer change-over to arrive at net sales for FY 2010-11. RInfra-D submitted that the change-over sales in FY 2010-11 has been considered same as that approved by the Commission in its Tariff Order for TPC-D dated September 12, 2010 in Case No. 98 of 2009. Further, RInfra-D has considered the impact of on-going and proposed Demand Side Management measures while developing the Base Case sales forecast, by reducing the energy proposed to be saved across each consumer category from the category's projected base case consumption. RInfra-D submitted that the change-over sales of 1278 MU for FY 2010-11 has been subtracted from the category-wise Base Case sales to determine projected sales by RInfra-D, which is 7,874.68 MU.

***Table: Category wise sales forecast for FY 2010-11***

<b>Category</b>	<b>FY 2010-11 Base Case sales</b>	<b>Approved Change over sales in FY 2010-11</b>	<b>FY 2010-11 projected sales to RInfra-D consumers</b>
	<b>(A)</b>	<b>(B)</b>	<b>(A-B)</b>
BPL + Residential	4,818	159	4,659
Commercial	2,388	359	2,029
LT III	172	25	148
LT IV	567	209	358

LT VII – Temporary	104	1	103
LT Others	65	0	65
HT Housing	44	10	34
HT Commercial	646	394	252
HT Industrial	339	120	219
HT Temporary	9	1	8
<b>Total</b>	<b>9,153</b>	<b>1,278</b>	<b>7,875</b>

The Commission has considered actual sales for FY 2009-10 as submitted by RInfra-D for provisional truing-up of FY 2009-10.

For FY 2010-11, the Commission obtained the details of actual category-wise sales for the 10-month period from April 2010 to January 2011 for RInfra-D's supply consumers. The Commission has pro-rated this actual category-wise sales for the entire FY 2010-11, by considering the share of sales in February and March of the previous year, for each consumer category separately. The category-wise sales projected by RInfra-D and approved by the Commission in this Order are given in the Table below:

*Table: Sales for FY 2010-11* *(in MU)*

Particulars	FY 2010-11	
	RInfra-D	Commission
<b>LT Category</b>		
LT I (Residential)	4659	4471
LT II (Commercial)	2029	1927
LT III (below 20 kW load)	148	140
LT IV (above 20 kW load)	358	265
LT VII (Temporary) Others	103	105
Others	65	60
<b>LT Total</b>	<b>7361</b>	<b>6968</b>
<b>HT Category</b>		
HT I (Industrial)	219	197
HT II (Commercial)	252	275
HT III (Housing)	34	26
HT Temporary	8	11
<b>HT Total</b>	<b>513</b>	<b>509</b>
<b>Total Sales</b>	<b>7874</b>	<b>7477</b>

The Commission has considered change-over sales in FY 2010-11 as approved by the Commission in its Tariff Order dated September 12, 2010 in Case No. 98 of 2009.

#### **5.4 DISTRIBUTION LOSSES AND ENERGY INPUT**

As discussed earlier, RInfra-D submitted that it had considered the distribution losses of 10.08% for FY 2009-10 for computing the energy input requirement. As discussed in earlier paragraphs, the Commission has considered the actual distribution losses for FY 2009-10 as 10.20% and target distribution loss of 10.25% for FY 2010-11.

The Energy Balance for FY 2010-11 is given in the Table below:

<b>Particulars</b>	<b>Unit</b>	<b>FY 2010-11</b>	
		<b>RInfra-D</b>	<b>Approved</b>
Sales (Own sales)	MU	7875	7477
Sales (Changeover)	MU	1278	1278
Distribution Loss	%	10.25%	10.25%
<b>Energy Requirement</b>			
Total energy requirement (T < > D Interface) attributable to changeover sale	MU	1361	1361
Total energy requirement (T < > D Interface) for RInfra-D	MU	8838	8394
Intra-State Transmission loss%	%	4.85%	4.85%
<b>Total energy requirement (At InSTS)</b>	<b>MU</b>	<b>9288</b>	<b>8822</b>

Thus, the total energy input required to be purchased by RInfra-D in FY 2009-11 has been approved as 8822 MU.

#### **5.5 ENERGY AVAILABILITY AND POWER PURCHASE COST DURING FY 2009-10 AND FY 2010-11**

##### **5.5.1 Procurement from RInfra-G:**

RInfra-D, in its Petition, submitted that it will procure the entire generation of RInfra-G during FY 2009-10 and FY 2010-11 in accordance with the details submitted in its APR Petition for FY 2009-10. Accordingly, RInfra-D projected a power purchase of 4085.30 MU and 3786 MU from RInfra-G at an estimated cost of Rs. 988.94 Crore and Rs. 1019.24 Crore for FY 2009-10 and FY 2010-11, respectively. The Fixed Charges have been estimated as Rs. 156.09 Crore and Rs. 216.61 Crore for FY 2009-10 and FY 2010-11, respectively, based on the Commission's Tariff Order

dated May 28, 2009 and September 8, 2010 for RInfra-G. The Energy Charges have been considered as Rs. 2.08 per unit for FY 2009-10 including generation FAC as accounted and Rs. 2.12 per unit for FY 2010-11 based on actual Rate of Energy Charges (REC) worked out for individual months from April to August 2010 and used in FAC computations (i.e., actual fuel cost based on actual generation and actual fuel prices, but computed on normative parameters). For the period September 2010 to March 2011, energy charges have been taken as per the Order dated September 8, 2010 for RInfra-G.

The Commission has not undertaken provisional truing up in the APR Order dated September 08, 2010 for RInfra-G in Case No. 99 of 2009. The Commission will undertake the final truing up of the revenue requirement and revenue for FY 2009-10 once the actual expenses and revenue based on the Audited Accounts of RInfra-G for FY 2009-10 are available.

The Commission observed that RInfra-D has submitted power procurement of 3927.35 MU from RInfra-G in FY 2009-10, however, while computing the summation of power purchase for FY 2009-10 and computation of power purchase cost in the Forms submitted along with the Petition, 4085.30 MU of power purchase from RInfra-G has been considered. The Commission has considered 4085.30 MU for provisional truing up.

In the present Order, the Commission has accepted the quantum and cost of power purchase from RInfra-G for FY 2009-10, as submitted by RInfra-D. The Commission clarifies that it would consider such purchase/sale based on actuals subject to prudence check during the truing up for FY 2009-10.

For estimating the quantum and cost of power purchase from RInfra-G during FY 2010-11, the Commission obtained the details of actual source-wise power purchase for the ten-month period from April 2010 to January 2011 from RInfra-D. The Commission has pro-rated the actual power purchase quantum for the entire FY 2010-11, by considering the share of sales in February and March of the previous year.

The Commission has considered the actual power purchase cost for ten months till January 2011 and for February and March 2011, the Commission has considered the fixed charge on the basis of fixed charge approved in the Order dated September 8, 2010 in Case No. 99 of 2009 and energy charge has been computed considering average rate of actual variable cost for five months from September 2010, after implementation of the Order dated September 8, 2010 in Case No. 99 of 2009.

The summary of the approved power purchase quantum and cost of power purchase by RInfra-D from RInfra-G for FY 2009-10 and FY 2010-11 is given in the following Table:

**Table: Summary of Power Purchase from RInfra-G**

Particulars	Unit	FY 2009-10			FY 2010-11	
		APR Order	Revised Estimate	Approved after provisional truing up	Petition	Approved
Purchase from RInfra-G	MU	3915.24	4085.30	4085.30	3786.00	3,688.02
	Rs Crore	966.12	988.94	988.94	997.47	885.69

### **5.5.2 Power Purchase from TPC-G**

RInfra-D submitted that it has considered purchase of 2,711.70 MU from TPC-G for FY 2009-10 in accordance with the energy billed by TPC-G. RInfra-D added that the quantum and realization from energy sold by TPC-G on behalf of RInfra-D out of 500 MW allocation during FY 2009-10 is adjusted in the power purchase expenses of RInfra-D from TPC-G.

For FY 2010-11, RInfra-D submitted that its efforts to enter into a PPA with TPC-G for 500 MW met with an unfavourable response from TPC-G and TPC-G decided to withdraw this 500MW capacity allocated to RInfra-D from April 1, 2010 onwards. In the interests of its consumers, RInfra-D made a representation against TPC-G's action before the Government of Maharashtra (GoM), which resulted in the GoM forming a five member Committee to look into the issues and

implications of withdrawal of capacity by TPC-G and other matters. Based on the recommendations of the Committee, in larger public interest, the GoM, vide its Memorandum dated May 7, 2010 advised TPC-G to continue to supply power to RInfra-D at the level of 358 MW till June 2010 and 198 MW thereafter, at regulated rates and directed the MSLDC to schedule power accordingly. The GoM further directed the Commission to, inter-alia look into the issues of dominance in supply of power by TPC-G while being in competition with RInfra-D in retail supply. RInfra-D submitted that the Commission has conducted hearings on these issues and the Order is awaited.

RInfra-D added that if the issue is decided in RInfra-D's favour, the outcome could be allocation of higher capacity from TPC-G to RInfra-D for some defined period. The capacity allocation and power availability from TPC-G to RInfra-D may also be affected by the pending Petitions in the Bombay High Court and with the Commission. RInfra-D for the purposes of this Petition, has considered capacity allocation from TPC-G in accordance with the GoM Memorandum. The total energy available (net of auxiliary consumption) from TPC-G is taken as per the Tariff Order for TPC-G for FY 2010-11 dated September 8, 2010 in Case No. 96 of 2009, as 9494 MU against total capacity of 1777 MW. As per the allocation of capacity contained in the GoM Memorandum referred above, this translates to 1,496 MU for RInfra-D in FY 2010-11.

As regards Fixed and Variable charges for power purchase from TPC-G for FY 2010-11, RInfra-D has considered the actual billing by TPC-G for the period April 2010 to September 2010 and for the period from October 2010 to March 2011, the Fixed Charges and Variable Charges are taken as per the aforesaid Tariff Order of TPC-G.

RInfra-D submitted that it has considered energy supply of 1496 MU taking into account 400 MW availability for the month April 2010 to June 2010 and 240 MW (excluding capacity of Unit-4 of TPC-G) thereafter, till March 2011. RInfra-D added that this allocation is in accordance with the GoM Memorandum.

RInfra-D submitted that it has entered into certain short-term power purchase contracts upto one year, before the commencement of FY 2010-11, which provided a minimum off-take of 70% on capacity and 80% on energy, at Rs. 2 per unit for not off-taking up to the minimum level. RInfra-D added that owing to the drop in prices of power in the power exchange (spot market), the scheduling from such short-term sources have been reduced to the minimum level, such that the net price payable is still lesser than the amount payable if all power from these contracts is off-

taken. RInfra-D submitted that it has considered the same price of short-term power for FY 2010-11.

The Commission has not undertaken provisional truing up in the APR Order dated September 08, 2010 for TPC-G in Case No. 96 of 2009. The Commission will undertake the final truing up of the revenue requirement and revenue for FY 2009-10 once the actual expenses and revenue based on the Audited Accounts of TPC-G for FY 2009-10 are available.

In this Order, the Commission has accepted the quantum and cost of power purchase from TPC-G for FY 2009-10 as submitted by RInfra-D. The Commission clarifies that it would consider such purchase/sale based on actuals subject to prudence check during the truing up for FY 2009-10.

For estimating the quantum and cost of power purchase from TPC-G during FY 2010- 11, the Commission obtained the details of actual source-wise power purchase for the ten-month period from April 2010 to January 2011 from RInfra-D. The Commission has pro-rated the actual power purchase quantum for the entire FY 2010-11, by considering the share of sales in February and March of the previous year.

The Commission has considered the actual power purchase cost for ten months till January 2011 and for February and March 2011, the Commission has considered the fixed charge on the basis of charges approved in the Order dated September 8, 2010 in Case No. 96 of 2009 and energy charge has been computed considering average rate of actual variable cost for five months from September 2010, after implementation of the Order dated September 8, 2010 in Case No. 96 of 2009.

The summary of the approved power purchase quantum and cost of power purchase by RInfra-D from TPC-G for FY 2009-10 and FY 2010-11 is given in the following Table:

**Table: Summary of Power Purchase from TPC-G**

Particulars	Unit	FY 2009-10			FY 2010-11	
		APR Order	Revised Estimate	Approved after provisional truing up	Petition	Approved
Purchase from TPC-G	MU	2941.98	2,711.70	2,711.70	1,496	1,287
	Rs Crore	933.37	1019.09	1019.09	524.81	428.99

### **5.5.3 Renewable Purchase Specification (RPS)**

RInfra-D submitted that there has not been a substantial increase in the availability of RE sources in Maharashtra. However, there has been increase in availability of RE with the erection of EHV S/S for evacuation of 45 MW wind project (of Reliance Innoventure) contracted by RInfra-D, which was commissioned during March 2009. All wind energy from this 45 MW project is being evacuated into InSTS. RInfra-D added that it has also entered into long-term contracts with JSPL for 18 MW and AAA & Sons for 3.375 MW for purchase of wind energy, which has added to RE procurement from FY 2009-10 onwards.

RInfra-D submitted that the actual procurement during FY 2009-10 from wind -based sources (long-term and short-term) is 146.45 MU. RInfra-D added that in order to match the quantum of power procurement with MSLDC IBSM statements, RInfra-D is not showing additional procurement from biomass based RE sources at short-term rates under this head and the same has been included under bilateral purchase.

Further, RInfra-D approached Group II Wind Energy developers whose existing EPAs have expired or are about to expire and contracted 100 MW from such projects. Also, RInfra-D has entered into short-term contracts with biomass, bagasse based cogeneration and Small- Hydro Projects with the intention of meeting both short-term power requirements as well as RPO targets.

As regards the fulfilment of solar RPO targets, RInfra-D submitted that it has finalized the terms of EPA for purchase of 40 MW solar power at regulated rates and the EPA is being concluded. The 40 MW Solar PV capacity is expected to be available from Q3 of FY 2011-12. Accordingly, RInfra-D submitted that it would be in position to meet its Solar RPO fully from FY 2012-13 onwards and cumulatively during FY 2011-12 till FY 2015-16.

Further RInfra-D submitted that in accordance with the Order dated October 28, 2010 which waived off the applicability of Regulation 7.2 of the MERC (Renewable Purchase Obligation, Its Compliance and Implementation of REC Framework) Regulations, 2010, which specified that any power procured by Distribution Licensees at rates other than the Preferential Tariff as approved by the Commission for RE procurement shall not be accounted towards RPO compliance for FY 2010-11. Accordingly, RInfra-D has not made any provisions for purchase of Renewable Energy Certificates (REC) to meet the shortfall in RE procurement for FY 2010-11. Hence, the total estimated quantum of power to be procured from RE sources in the long-term at



Preferential Tariffs for FY 2010-11 is 144.24 MU. RInfra-D submitted the details as shown below:

Source	RE type	Capacity (MW)	Contract	Estimated generation (MU)	Rate (Rs./unit)	Amount (Rs. Cr)
Reliance Innoventures	Wind	45.00	Long-Term	91	3.65	33.09
AAA Sons Enterprises	Wind	3.38	Long-Term	7	3.65	2.48
JSPL	Wind	18.00	Long term	36	3.65	13.24
JSPL	Wind	6.00	Long term	11	4.29	4.51
<b>Total</b>		<b>223.88</b>		<b>144</b>		<b>53.32</b>

RInfra-D, in its Petition, submitted that the RE power, which is not contracted at Preferential Tariff and being received, is shown separately under the head “Short-Term renewable energy already contracted”. RInfra-D added that the power purchase rate mentioned is the weighted average rate of all such contracts put together.

As regards the enforcement on account of non-fulfilment of the RPS target, the Commission, in its Order dated August 7, 2009 in Case No. 125 of 2008 modified the RPS percentage requirement for FY 2007-08, FY 2008-09 and FY 2009-10. Para-39 of Order dated August 7, 2009 (Case No. 104, 122 and 125 of 2008) is reproduced below:

*“39. Further, considering year-to-year shortfall in RE capacity addition, the Commission is of the view that it would not be practical to expect that such shortfall can be made good on cumulative basis by the end of FY 2009-10. Hence, the Commission believes that in pursuance of Cl. 2.6.12 of RPS Order (Case 6 of 2006), it would be most appropriate to modify the RPS percentage requirement for FY 2007-08, FY 2008-09 and FY 2009-10 to be lower of (a) RPS target as specified under Cl. 2.6.7 or (b) actual achievement of RPS target in respect of each "Eligible Person".*

Therefore, for FY 2009-10, the Commission has considered the purchase from Renewable energy sources as submitted by RInfra-D in the Petition.

As regards RPS target for FY 2010-11, the Commission has considered 6% of total power procurement to be purchased from Renewable Energy sources out of total power purchase quantum in accordance with MERC (Renewable Purchase Obligation, its Compliance and Implementation of REC Framework) Regulations, 2010.

Based on the total energy input approved by the Commission, the RPS obligation of RInfra-D for FY 2010-11 works out to 529 MU and corresponding cost works out to Rs. 207.98 Crore, assuming an average rate of Rs. 3.93/kWh by considering an escalation of 5% over the actual average rate of RE energy in FY 2009-10. Though the Commission has considered the purchase rate of Rs. 3.93/kWh from renewable sources, the Commission clarifies that it would consider the actual power purchase cost considering the actual purchase and effective purchase rate in accordance with the tariff approved for such RE sources from where RInfra-D purchases RE, while undertaking the truing up for FY 2010-11.

#### **5.5.4 Purchase from Bilateral Contracts and Imbalance Pool**

RInfra-D submitted that the net shortage after exhausting availability from firm sources (including RE sources) is being met through purchase of power on short-term basis from the external market and absorbed from the State Imbalance Pool. The power procured from short-term sources is done through the MPMG as well as through independent contracting from traders, Energy Exchanges, Merchant Power Plants, CPPs, etc. RInfra-D submitted that for FY 2009-10, the average rate of 2,051.97 MU procured from bilateral sources and 712.39 MU procured from State Imbalance Pool has been Rs. 6.90 per unit and Rs. 6.52 per unit, respectively. Thus, the weighted average rate of power purchased from both of these sources is Rs. 6.80 per unit.

For FY 2010-11, RInfra-D submitted that the balance requirement of power, after sourcing from RInfra-G, TPC-G and RE sources, has been considered to be met through procurement from short-term contracting and through the MPMG. RInfra-D added that Decrement/Increment from/to Imbalance Pool cannot be separately forecasted as the same is incidental to demand-supply situation as prevailing from time to time.

As regards price of power purchase from these sources for FY 2010-11, RInfra-D submitted that it has considered an average price of Rs. 4.71 per unit for short-term procurement as approved by the Commission in its Tariff Orders for FY 2010-11 for TPC-D and BEST in Case Nos. 98 of 2009 and 95 of 2009, respectively.

For FY 2009-10, the Commission has considered the actual quantum and cost of power purchase from short-term sources/IBSM during FY 2009-10, under the provisional truing up process.

For FY 2010-11, the Commission obtained the details of actual source-wise power purchase for the ten-month period from April 2010 to January 2011 from RInfra-D. RInfra-D has submitted the details of sale to imbalance pool till January 2011. The Commission has pro-rated this actual power purchase quantum for the entire FY 2010-11, by considering the share of sales in February and March of the previous year. The Commission has considered the actual income from sale to imbalance pool for ten months till January 2011 and has considered the average rate of power sales for these 10 months to compute the income from sale to imbalance pool February and March 2011.

The Commission has considered the normative distribution loss of 10.25% for RInfra-D for FY 2010-11, as explained earlier. After considering the power available from RInfra-G, TPC-G, RPS and imbalance pool, the total power purchase quantum requirement from other sources works out to 3560 MU to meet the projected energy input requirement. This balance power requirement has to be met from bilateral contracts.

For estimating the power purchase cost, the Commission has considered the actual power purchase cost for ten months till January 2011 and has considered the average rate of power purchase for these 10 months to compute the power purchase cost for February and March 2011. However, the Commission clarifies that it would consider such purchase/sale based on actuals subject to prudence check during the truing up for FY 2010-11.

The summary of power purchases/sale including bilateral sources/imbalance pool as projected by RInfra-D and as approved by the Commission for FY 2009-10 and FY 2010-11 is given in the Table below:

**Table: Power Purchase quantum and cost for FY 2009-10 and FY 2010-11**

Particulars	FY 2009-10				FY 2010-11			
	Revised Estimate		Approved		Proposed		Approved	
	MU	Rs Crore	MU	Rs Crore	MU	Rs Crore	MU	Rs Crore
DTPS	4085	989	4085	989	3786	997	3688	886
TPC – G	2712	1,019	2712	1,019	1496	525	1287	429
RE sources	146	55	146	55	144	53	529	208
Bilateral	2052	1,416	2052	1,416	3862	2023	3560	2001
Imbalance Pool	712	465	712	465			-242	-183
<b>Total power purchase</b>	<b>9708</b>	<b>3,944</b>	<b>9708</b>	<b>3,944</b>	<b>9288</b>	<b>3,599</b>	<b>8822</b>	<b>3340</b>

The Commission in its various Orders relating to RInfra-D's power purchase, over the past 5-6 years, has directed RInfra-D to enter into long-term PPAs to meet its demand and energy requirement and submit its PPA and Long term purchase plan for the Commission's approval. However, the Commission is constrained against disallowing any part of the power purchase, since under the MERC Tariff Regulations, power purchase is not a controllable expense, and the Hon'ble Appellate Tribunal has also held in its Judgment dated May 4, 2009 in Appeal No. 71 of 2007, as under:

***"...The Electricity Act has sufficient provision for handling the situation of disobedience. As already mentioned above, section 142, gives the Commission, power for punishment in such a situation. The Commission is a creation of the statute. Even if such power given is considered by the Commission to be insufficient the Commission cannot convert its power of tariff fixation given by section 61 and 62 of the Electricity Act 2003 into a proceeding for imposing penalty..."(emphasis added)***

Hence, the Commission has not disallowed any part of the power purchase expenses in this Order.

#### **5.5.5 Prior period adjustments/payments**

As regards the prior period adjustments/payments attributable to power purchase, RInfra-D submitted that in addition to stand-alone cost of power purchase for FY 2009-10, payment of Rs. 8.50 Crore to TPC was made on account of the Commission's Order dated September 10, 2009, in Case No. 46 of 2009, as reproduced below:

*"The non-consideration of the amount of Rs. 8.50 Crore in the ARR of RInfra-D is due to oversight and the fact that RInfra-D had not included the amount in its revised APR Petition, even though the Order in Case No. 46 of 2008 was issued before the revised APR Petition was submitted by RInfra-D. It is clarified that RInfra-D should refund this amount to TPC-G and include the same in its ARR Petition for FY 2009-10."*

RInfra-D submitted that the abovementioned amount has been paid to TPC-G during FY 2009-10 and accordingly, included in the ARR of FY 2009-10. Further, the Commission vide its Tariff Order dated September 8, 2010 in Case No. 96 of 2009 approved Rs. 5.49 Crore to be recovered by TPC-G from RInfra-D spread equally over the 7 month period starting September 2010. Accordingly, RInfra-D has added this amount to the ARR of FY 2010-11.

The Commission has included these additional power purchase costs for computation of power purchase cost, as the same are in accordance with the Commission's Orders in this regard.

Further, RInfra-D has claimed an expense of Rs. 34 Crore under the Power Purchase cost of FY 2009-10 as submitted in the formats provided, however, no explanation for the same has been submitted in the Petition. The Commission has identified that this expense is on account of Hon'ble ATE Judgment in Appeal No 60 of 2007 for TPC-G. The Commission in its Order dated May 28, 2009, in Case No. 111 of 2008, approved the total amount of Rs. 85 Crore on account of impact of Hon'ble ATE Judgment in Appeal No 60 of 2007, on truing up for FY 2004-05 and FY 2005-06. This net amount of Rs. 85 Crore was to be recovered from Distribution Licensees for previous years in weighted average proportion of energy supplied by TPC to RInfra, BEST and TPC's retail consumers during FY 2004-05 and FY 2005-06 as most of the amount pertains to these years. On account of this, the Commission has allowed the expense of Rs. 34 Crore for FY 2009-10.

#### **5.5.6 Standby Charges**

RInfra-D submitted that it has considered stand-by charges of Rs. 224.50 Crore as approved by the Commission in its Tariff Order dated June 15, 2009 in Case No. 121 of 2008 for FY 2009-10. Further, RInfra-D requested the Commission to revisit the issue of appropriateness of the present methodology for computation of stand-by charges before determination of stand-by charges for FY 2010-11. Further, RInfra-D submitted that it paid Rs. 2 Crore towards stand-by charges for FY 2008-09 to MSEDCL during FY 2010-11. Thus, the same has been included in the total stand-by charges for FY 2010-11.

As regards the basis of sharing of Stand-by Charges, RInfra-D submitted that the stand-by charges should not be shared among the distribution licensees on the basis of their contribution to system peak demand (i.e., licensee's CPD) because the stand-by support available from MSEDCL to the licensees exists only as a back-up to kick in only if a Unit of TPC-G or RInfra-G is on outage and the same is not available to meet the demand if there is failure in any other source(s) of power. Further, the support is limited to 550 MVA, which is the maximum size generating unit of Mumbai generation. RInfra-D's procurement consists of a large quantum from external sources to meet the demand of its consumers and MSEDCL is not obligated to render any support in the event of failure of any such source. Further, RInfra-D is going to purchase power under medium term and long-term power through competitive bidding in the coming years and outage of new generating capacity contracted under Medium-Term or Long-Term would not be covered by stand-by support. RInfra-D added that the Coincident Demand or Non-coincident Demand or Average Demand of a Distribution Licensee represents customer

requirement/load, which in turn, reflects all available generation capacity/energy with the Distribution Licensee, as the same is being met from available generation. Further, RInfra-D added that support from MSEDCL is a specific service meant only as a replacement for any outage in the generating units of TPC-G or RInfra-G, and thus, costs associated with such service ought to be shared in the ratio of allocated generation capacities to the distribution licensees out of TPC-G and RInfra-G generation only. Any other basis would not be a reflection of the specific guarantee that the support provides. RInfra-D requested the Commission to reconsider its approach in the light of merits of RInfra-D's arguments. RInfra-D added that it has considered the existing method of CPD ratio based sharing for the purpose of projection of stand-by charges for FY 2010-11.

The Commission has accepted the submission of RInfra-D for FY 2009-10, and has considered the same for provisional truing-up for FY 2009-10.

As regards the additional standby charge of Rs. 2 crore paid in FY 2010-11 towards standby charges payable for FY 2008-09, the Commission has considered standby charges of Rs. 222.40 Crore for FY 2008-09 as approved in the APR Order dated June 15, 2009, and reduced Rs. 2 Crore from the standby charges for FY 2010-11 to Rs. 212.45 Crore, as against RInfra-D's submission of Rs. 214.45 Crore.

For FY 2010-11, the Commission has allocated the Standby Charges between the three Distribution Licensees in Mumbai as explained by the Commission in the Order dated September 12, 2010 in Case No. 98 of 2009 for TPC-D, after adjusting the shifting of load from RInfra-D to TPC-D following the Hon'ble Supreme Court Judgment dated July 8, 2008. In the said Order, the Commission has modified the contribution of TPC-D and RInfra-D to the average Coincident Peak Demand to share the Total Transmission System Charges (TTSC) for FY 2010-11.

Accordingly, the Standby Charges allocated to RInfra-D for FY 2010-11, works out to Rs. 203.84 Crore. However, as the Commission revised the allocation of Standby Charges vide its Order dated September 12, 2010 in Case No. 98 of 2009 for TPC-D with effect from September 2010, the modified allocation of Standby Charges will be applicable to RInfra-D also from September 2010. Thus, the above share of RInfra-D has been considered for 7 months, and the Standby Charges for the remaining 5 months have been considered in accordance with the previous APR Order of RInfra-D. Hence, RInfra-D should pay Standby Charges of Rs. 212.45 Crore to MSEDCL during FY 2010-11.

### **5.5.7 MSLDC Charges**

RInfra-D submitted that it has considered Rs. 79.02 Lakh for Annual SLDC Operating Charges and Rs. 24.26 Lakh for Annual SLDC Fees for FY 2009-10 based on coincident peak demand. RInfra-D added that it has considered the SLDC Fees and Charges as approved by the Commission vide its Order dated August 6, 2010 in Case No. 94 of 2009 for FY 2010-11, without considering the adjustment to CPD on account of change-over.

The Commission has considered MSLDC Charges at Rs. 1.03 Crore as submitted by RInfra-D in FY 2009-10.

As regards the MSLDC charges for FY 2010-11, the Commission, in its Order dated August 6, 2010 in Case No. 94 of 2009, in the matter of approval of MSLDC Budget for FY 2010-11, has determined the MSLDC Fees and Charges for FY 2010-11. The Commission has considered RInfra-D's share of the approved MSLDC Budget for FY 2010-11 in accordance with the above-said Order. Further, the Commission has considered the MSLDC Operating charges for 8 months based on the Order dated August 6, 2010 and for 4 months, the Commission has considered MSLDC Operating Charges as approved in the Order dated April 29, 2009 in Case No. 117 of 2008. The total MSLDC Fees and Operating Charges payable by RInfra-D during FY 2010-11 works out to Rs. 1.30 Crore.

### **5.5.8 Supreme Court Judgment on Additional Energy Charges Matter**

RInfra-D submitted that in accordance with the ATE Judgment in the matter of Additional Energy Charges, which directed RInfra to pay Rs. 0.32 per unit Additional Energy Charges to TPC for the period April 1, 1998 to April 31, 2000, the Hon'ble Supreme Court has directed RInfra-D to pay Rs. 25 Crore to TPC and give a Bank Guarantee of Rs. 9 Crore to TPC in Appeal No. 4161 of 2009. Accordingly, RInfra-D has included Rs. 25 Crore in the FY 2009-10 truing-up.

The Commission asked RInfra-D to confirm if the said expense of Rs. 34 Crore, with or without interest, has not already been recovered from its consumers through the ARR approved by the Commission for previous years. RInfra-D confirmed that this amount of Rs. 34 Crore has never been recovered from its consumers through the ARR approved by the Commission for previous years.

The Commission is of the view that as a prudent practice, Companies are required to create provision for Contingency Liabilities in their Audited Accounts for such expenses. It may be noted that, as per the Hon'ble Supreme Court Order submitted by RInfra-D, the amount of Rs. 25 Crore is deposited with the Court. This amount shall be paid to TPC or refunded to RInfra-D depending on the final Supreme Court Order. Hence, the Commission has not considered this expense for FY 2009-10 and shall consider the same depending on the final Judgment of the Hon'ble Supreme Court in this matter.

#### **5.5.9 Transmission Charges**

RInfra-D, in its Petition, submitted that the Commission in its Tariff Order dated June 15, 2009 in Case No. 121 of 2008 approved transmission charges of Rs. 183.72 Crore payable by RInfra-D for FY 2009-10. Accordingly, RInfra-D has considered the approved transmission charges payable by RInfra-D for FY 2009-10.

For FY 2010-11, RInfra-D submitted that the Commission in its Order dated September 10, 2010 in Case No. 120 of 2009 in the matter of Determination of Transmission Tariff for Intra-State Transmission System (InSTS) determined the manner in which the transmission charges are to be paid by the Transmission System Users (TSU's) for FY 2010-11. RInfra-D added that the abovementioned Order on InSTS charges is effective from September 2010. Accordingly, RInfra-D has considered the approved transmission charges of Rs. 214.10 Crore payable by RInfra-D for FY 2010-11.

The Commission has considered Transmission Charges at Rs. 183.72 Crore as submitted by RInfra-D in FY 2009-10. For FY 2010-11, the Commission, vide its Order dated September 10, 2010 in Case No. 120 of 2009 on determination of Transmission Tariff for the Intra-State Transmission System, has approved the revised Transmission Charges for FY 2010-11 with effect from September 1, 2010. Accordingly, the Commission has considered the monthly transmission charges for FY 2010-11 payable by RInfra-D as approved in the Order dated September 10, 2010 in Case No. 120 of 2009 for seven months and has considered the approved monthly transmission charges for 5 months as approved in its Order in Case No. 155 of 2008. Accordingly, the total transmission charges payable by RInfra-D for FY 2010-11 as approved by the Commission works out to Rs. 214.13 Crore.

#### **5.6 O&M EXPENSES FOR FY 2009-10 AND FY 2010-11**

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



### **5.6.1 Employee Expenses**

RInfra-D submitted that it has incurred an employee expenditure of Rs. 344.4 Crore for FY 2009-10 as against Rs. 306.62 Crore approved by the Commission in the Tariff Order dated June 15, 2009. RInfra-D submitted that in order to retain requisite talent and reduce high attrition rate of employees, RInfra-D has had to increase the compensation packages. RInfra-D added that there has also been an increase in DA Index to the extent of 28%, between FY 2008-09 and FY 2009-10, which caused an increase of about 12% in the salaries of Unionised Employees and above 10% in the salaries of Officers.

For FY 2010-11, RInfra-D has considered an increase of around 8.49% p.a. on account of inflation over the actual values of FY 2009-10. RInfra-D has considered average inflation rate for five year period, i.e., from FY 2005-06 to FY 2009-10 in accordance with the Commission's Order dated September 3, 2010, in Case No. 100 of 2009. RInfra-D added that under an Agreement dated April 1, 2010 with the Representatives and Approved Union under B.I.R Act 1946, RInfra-D has to fill up a large number of vacant posts in the Mazdoor, Jr. Helper, Linesman, Jr. Assistant and Sub-engineer categories. Thus, in FY 2010-11, the total number of employees to be recruited/ regularized will be approximately 1285 causing a financial impact of around Rs. 8.77 Crore.

For FY 2009-10, the Commission asked RInfra-D to submit justification for all heads, where the increase in expenditure is over 7.31% on year-on-year basis.

RInfra-D submitted that Dearness Allowance (DA) has two components - a fixed component and a variable component. Variable Dearness Allowance (VDA) is computed from the DA points data, based on the circular received from Bombay Chamber of Commerce. The VDA is revised every quarter, based on the change in DA points. The change (mostly increase) in DA points is mainly due to inflation. RInfra-D explained that there is an increase of about 56% during FY 2009-10 over FY 2008-09 on account of change in DA points. Generally there is an increase in Basic Salary for the employee in the subsequent financial year, on account of promotion or increment. Therefore, there is a further increase in the VDA on account of increase in Basic Salary. The fixed DA, however, decreases with retirement and separation of old employees, as new recruits do not have any DA component in their salary (neither fixed nor variable component).

RInfra-D submitted that Other Allowances have increased due to increase in Special Allowance, Performance Linked Incentives, Retention Bonus, and Variable Pay. RInfra-D submitted that

Special Allowance increased by Rs. 8.47 Crore during 2009-10. RInfra-D explained that the employees under Cost to Company (CTC) have choice/flexible salary structure, where they can choose the amount to be paid to them under the head of their choice (keeping the overall CTC constant). The choice pay part of their CTC is fixed, and they can choose choice pay options and the balance amount, if any, is paid to them as “special allowance” and is subject to tax deduction. During FY 2009-10, there were few changes (reduction) in the limits applicable to some of the choice pay options and consequently there was an increase in the “special allowance”.

RInfra-D submitted that the employees are provided incentives based on their performance ratings and retention bonus may be provided to them to curb attrition and retain talented and dedicated employees. These incentives and bonuses encourage employees to maintain higher levels of productivity sought from them, and meet the demanding expectations of increasing business size (increased consumer and asset base). These components together attributed to an increase of Rs. 9.15 Crore in “Other Allowances” during FY 2009-10.

RInfra-D further submitted that during FY 2009-10, an increment of Rs 2.40 Crore in the form of “Variable Pay” was provided to the employee exhibiting outstanding performance and rated as “Very Good” and “Excellent”. This component was included under “Basic Salary” in the earlier years, it is now included in Other Allowances.

RInfra-D submitted that Overtime Payment has increased by Rs. 8.50 Crore since there was an increase in the “Basic Salary” on account of yearly increments and promotion; and Variable Dearness Allowance increased, consequently Overtime Payment also increased as per the formula.

RInfra-D submitted that Ex-gratia has been increased by Rs. 2300/-per employee compared to previous year amounting to an increase of Rs. 0.78 Crore. Further, there was an under provision in FY 2008-09 of Rs. 0.85 Crore. Hence, the total increase for FY 2009-10 was Rs. 2.69 Crore (including the adjustment for under provision for FY 2008-09). Gratuity has partly increased on account of new recruitments and amendment to the Payment of Gratuity Act 1972 on May 24, 2010, whereby Gratuity amount was increased from Rs. 3.5 lakh to Rs. 10.0 lakh. The Company’s Accounts for FY 2009-10 were not finalised, when the amendment was notified. Accordingly, additional burden of Gratuity was provided in books of accounts for 2009-10 itself, for an amount of Rs 7.6 Crore.

The Commission has accepted the justification submitted by RInfra-D. Ex-Gratia Payments has increased by Rs 2.7 Crore, however, RInfra-D has explained an increase of only Rs 1.63 Crore, thus, the increase of Rs 1.07 Crore has not been justified by RInfra-D. Also, Other Allowances has increased by Rs 23.90 Crore, however, RInfra-D has explained an increase of only Rs 20.02 Crore, thus, the increase of Rs 3.88 Crore has not been justified by RInfra-D. The Commission has approved the actual Employee expenses except the unjustified amount of Rs 4.95 Crore.

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

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

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

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate	Approved After provisional truing up	Estimate	Approved
Net Employee Expenses	306.62	344.43	339.45	382.44	368.52

### **5.6.2 Administrative & General (A&G) Expenses**

RInfra-D submitted that it has incurred A&G expenses of Rs. 124.98 Crore for FY 2009-10, as against Rs. 111.73 Crore approved by the Commission. RInfra-D added that the expenses incurred in FY 2009-10 are about 11% higher than the expenses of FY 2008-09. For FY 2010-11, RInfra-D has considered an increase of around 7.02% p.a. on account of inflation over the actual values of A&G expenses for FY 2009-10.

For FY 2009-10, the Commission asked RInfra-D to submit justification for all heads, where the increase in expenditure is over 6.04% on year-on-year basis.

RInfra-D submitted that rent rates and taxes have increased including BMC lease rent, MMRDA lease rent, rent of office premises at RNA Bandra and MIAL rent. Further, O&M and Capital Stores at various locations were shifted to centralised stores at Kurla, this led to increase in the rent.

RInfra-D submitted that against provisional balance in VAT recoverable amount of Rs. 3.65 Crore pertaining to FY 2006-07, sales tax refund of only Rs. 2.05 crore was received in FY 2009-10. Hence, short refund received of Rs.1.60 Crore was written off in FY 2009-10.

RInfra-D submitted that the premium of Mediclaim policy has increased due to increase in the number of employees by 240 numbers and high claim ratio as observed in the past years. It is seen that generally the Claim Ratio of Mediclaim are more than 100%, i.e., the claims are more than premium paid. Because of high claim ratios, the Premium set by the Insurer for a year is more. There is an increase in Group Personal Accident policy premium by Rs 0.24 Crore due to high claim and the increase in Std. Fire & Sp. Peril Policy covering T&D Assets was Rs. 0.09 Crore. The increase was mainly due to the increase in number of receiving stations from 59 in FY 2008-09 to 65 in FY 2009-10.

RInfra-D submitted that Telephone & Postage expenses have increased in FY 2009-10, which include expenditure on AMR (Automatic Meter Reading) and SCADA (Supervisory Control and Data Acquisition) usage. These expenses, for these particular reasons, were clubbed under the head of R&M expenses in FY 2008-09. However, during FY 2009-10, the expenses on SCADA and AMR were provided under the head of A&G Expenses (under sub-head of Telephone and postage), being related to data communication and similar in nature to some of the other expenses under sub-head of Telephone & postage, etc.

RInfra-D submitted that there was marginal increase in electricity expenses due to increase in usage and rates. Fees and Subscription had a nominal increase of Rs. 0.06 Crore on account of increase in subscription charges.

RInfra-D submitted that Rs. 0.89 Crore of advertisement expenses was incurred in FY 2009-10, to call bids for Long term Power Purchase.

RInfra-D submitted that Software Development (SAP R/3), software up-gradation to ECC 6, Portal Development, and Lotus Notes Domino upgradation resulted in increase of Rs. 1.47 Crore. There was an increase in Internet Access Charges due to Co-location Services to the tune of Rs 0.60 Crore.

RInfra-D submitted that various Training Programs during the year were conducted with the external parties for employees, resulting in the increase in expenses. Octroi charges increased from Rs. 2.31 Crore in FY 2008-09 to Rs. 5.44 Crore in FY 2009-10 resulting in increase of Rs. 3.13 Crore.

The Commission has accepted the justification submitted by RInfra-D, and approved the actual A&G expenses for FY 2009-10. For FY 2010-11, for each sub-head of A&G expenditure, the Commission has considered an increase on account of inflation rate of around 7.02% p.a. over the revised level of A&G expenses as approved for FY 2009-10 under the provisional truing up exercise in this Order, based on the increase in CPI and WPI. For FY 2010-11, the Commission has considered the point to point inflation over CPI for Industrial Workers and WPI numbers for a period of 5 years, starting from FY 2005-06 to FY 2009-10 (upto March 2010), to smoothen the inflation curve. Accordingly, the approved A&G expenses for FY 2009-10 and FY 2010-11 is summarised in the following Table:

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

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate	Approved After provisional truing up	Estimate	Approved
<b>Net A&amp;G Expense</b>	111.73	124.98	124.98	133.75	133.75

### **5.6.3 Repairs and Maintenance Expenditure**

RInfra-D submitted that it has incurred total R&M expenses of Rs. 157.84 Crore for FY 2009-10, as against Rs. 148.47 Crore approved by the Commission. RInfra-D added that the expenses incurred for FY 2009-10 are about 16% higher than the expenses of FY2008-09.

For FY 2010-11, RInfra-D has considered an increase of around 6.05% p.a. on account of inflation over the actual values of R&M expenses for FY 2009-10. RInfra-D submitted that there

has been an increase in Reinstatement (RI) charges since March 2010. RInfra-D has considered an increase of 5% in RI charges component, which works out to increase of Rs. 26.10 Crore in R&M expenses in FY 2010-11 over and above the normal inflationary increase of 6.05%.

RInfra-D submitted that the RI charges applicable as per MCGM till FY 2009-10 have been Rs. 4547 per running metre. The MCGM has communicated vide its Circular dated 19th March 2010 that the RI charges will be revised with effect from the date of the Circular to Rs. 7677 per running metre, i.e., an increase of roughly 69% over previous rates. In fact, the constant increase in RI charges by MCGM has been one of the major factors for increase in capital expenditure by RInfra-D over the past few years.

RInfra-D submitted the RI charges for Asphalt roads for the past few years as under:

**Table: Increase in RI charges**

<b>Period of applicability</b>	<b>Rates (per running metre)</b>	<b>% Increase</b>
April 2003 to Feb 2004	743	
Mar 2004 to Mar 2005	1266	70.39%
Mar 2005 to Sept 2005	2489	96.60%
Sept 2005 to July 2007	3089	24.11%
July 2007 to June 2008	4625	49.72%
June 2008 to March 2010	5087	9.99%
19th Mar 2010 onwards	8600*	50.90%

\*Average charges for Asphalt roads only as per the MCGM Circular. However, the rate used for projecting capex is Rs. 7677 per running meter, which is the average rate for all types of roads/pavements.

For FY 2009-10, the Commission has considered actual R&M expenses submitted by RInfra-D. However, the Commission clarifies that it would undertake final truing up of O&M expenses for FY 2009-10 in the next tariff determination based on Audited Accounts and prudence check.

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

inflation over WPI numbers for a period of 5 years, starting from FY 2005-06 to FY 2009-10 (upto March 2010), to smoothen the inflation curve. Accordingly, the approved R&M expenses for FY 2009-10 and FY 2010-11 is summarised in the following Table:

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

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate	Approved After provisional truing up	Estimate	Approved
<b>Net R&amp;M Expenses</b>	148.47	157.84	157.84	193.49	167.39

#### **5.6.4 O&M expenses**

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

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

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate	Approved After provisional truing up	Estimate	Approved
<b>Net Employee Expenses</b>	306.62	344.43	339.45	382.44	368.52
<b>Net A&amp;G Expenses</b>	111.73	124.98	124.98	133.75	133.75
<b>Net R&amp;M Expenses</b>	148.47	157.84	157.84	193.49	167.39
<b>Total O&amp;M Expenses</b>	<b>566.82</b>	<b>627.25</b>	<b>622.27</b>	<b>709.68</b>	<b>669.67</b>

#### **5.7 CAPITAL EXPENDITURE AND CAPITALISATION**

For FY 2009-10, RInfra-D submitted a capital expenditure of Rs. 434.32 Crore with total capitalization of Rs. 426.29 Crore as against Rs. 195.96 Crore approved by the Commission in the previous APR Order. RInfra-D added that out of the total capital expenditure, Rs. 392.34 Crore is against DPR related schemes and Rs. 33.95 Crore is on non-DPR schemes. A summary of capex schemes executed in FY 2009-10 is given below, as submitted by RInfra-D:

**Table: Capitalisation on schemes executed in FY 2009-10 (Rs. Crore)**

DPR schemes		Non-DPR schemes	Total capitalization
Approved	Submitted, approval not received		
307.72	84.62	33.95	426.29

RInfra-D submitted a brief description of DPR/non-DPR schemes implemented/under implementation. It submitted that for development of network, it has created infrastructure at distribution level to meet load growth, installed/replaced Receiving Stations at sub-transmission level, created infrastructure at Secondary distribution level, installed capacitors for improvement of power factor, and provided lighting on streets in RInfra supply area. Further, expenditure was incurred for procurement of IT infrastructure, and various tools, tackles, furniture and vehicles, construction and repair of building.

For FY 2010-11, RInfra-D proposed to undertake capital works of Rs. 420.31 Crore, which includes Rs. 382.69 Crore towards DPR schemes and Rs. 37.62 Crore towards non-DPR schemes. RInfra-D has submitted the overview of schemes. Further, RInfra-D, vide its letter dated May 28, 2010 submitted a DPR of the proposed Distributed Gas Based Generating project to the Commission. RInfra-D added that pursuant to the approval, certain initial expenditure of Rs. 0.20 Crore for activities such as obtaining environmental approvals, water and gas connections, pre-commissioning studies, etc., has been included in the capital expenditure. Further, no capitalization on this scheme has been considered for FY 2010-11.

As regards the details of capital expenditure for FY 2010-11, RInfra-D proposed:

- Rs. 86.27 Crore for installation and commissioning of new Receiving Stations;
- Rs. 141.48 Crore for 11 kV Network Strengthening schemes;
- Rs. 55.57 Crore for laying of new LT feeders, installation of feeder pillars, up-gradation of existing ones;
- Rs. 46.68 Crore for installation of various types of meters and associated equipments;
- Rs. 16.85 Crore for providing street lighting in its supply area.

RInfra-D, in its reply to the Commission's query regarding capital investment incurred for street lighting, submitted that historically RInfra-D (formerly Reliance Energy, BSES and Bombay



Suburban Electric Supply) as well as BEST had contractual agreements to install, maintain and operate the street lights in their respective areas. Consequently, these assets were also included in the distribution assets of RInfra-D.

RInfra-D added that there will be spill-over expenditure on land and disaster management schemes amounting to Rs. 8.29 Crore and Rs. 1.25 Crore, respectively.

RInfra-D submitted the details of increase in Road Re-Instatement (RI) charges by the Municipal Corporation of Greater Mumbai (MCGM). RInfra-D added that the RI charges have been revised from March 19, 2010 to Rs. 7677 per running meter, i.e., an increase of around 69% over previous rate of Rs. 4547 per running meter. Further, RInfra-D added that the constant increase in RI charges has been one of the major factors for increase in capital expenditure over the past few years and the additional impact on capital expenditure due to revision of I charges would be Rs. 48.71 Crore. RInfra-D submitted that the projected capex for FY 2010-11, after considering revised RI charges is as under:

**Table: Proposed Capital Expenditure for FY 2010-11 (Rs. Crore)**

S. No.	Description	Proposed Capex for FY 2010-11 (Rs Crore)
1.	Receiving Station	86.27
2.	11 kV Network strengthening	141.48
3.	LT Mains	55.57
4.	Services	46.68
5.	Metering	26.01
6.	Street Lighting	16.85
7.	Disaster Management System	1.25
8.	Land	8.29
9.	Distributed Generation Project	0.20
<b>Total</b>		<b>420.31</b>

The capitalisation proposed by RInfra-D for FY 2010-11 is as under:

**Table: Proposed Capitalisation in FY 2010-11 (Rs. Crore)**

DPR schemes			Non-DPR schemes	Total capitalization
Approved	Submitted, approval not received	Not submitted		
171.52	195.41	0.00	28.94	395.87

For the purpose of APR exercise for FY 2009-10 and projection for FY 2010-11, the Commission has considered capital expenditure and capitalisation of the DPR schemes that have already been approved by the Commission.

Further, as regards the DPR submitted for in-principle approval by RInfra-D for the proposed scheme of Distributed Gas Based Generating project, the Commission observes that the *Guide Lines* dated February 9, 2005 for submission of Capex Schemes for *in-principle* approval, as amended on February 18, 2008, excludes such schemes from the scope of *in-principle* approval of the Commission. Hence, *in-principle* approval of capex scheme for setting up of the said new Generating facility is not required. The same has been communicated by the Commission to RInfra-D vide its letter dated May 5, 2011, along with certain other queries to be addressed by RInfra-D.

As regards non-DPR schemes, the Commission had issued a direction in this respect in the previous APR Order, restricting the capitalisation of such schemes to 20% of the capitalisation of DPR schemes during the year. It is observed that the capitalisation against non-DPR schemes during FY 2009-10 and FY 2010-11 as submitted by RInfra-D is within the limit as specified in the previous APR Order and the same has been considered for approval. Accordingly, the approved capitalisation for FY 2009-10 and FY 2010-11 is summarised in the following Table:

**Table: Capitalisation as approved by Commission for FY 2009-10 & FY 2010-11**

*(Rs. Crore)*

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate	Approved After provisional truing up	Estimate	Approved
<b>Total Capitalisation</b>	195.96	426.29	341.67	395.87	200.46
Wire Related Capitalisation	195.96	369.18	341.67	369.87	200.46
Supply Related Capitalisation	0.00	57.11	0.00	26.00	0.00

### **5.7.1 Capital investment in parallel licensee scenario**

RInfra-D submitted that the Commission has stated that the parallel licensee should incur capital expenditure for the purpose of network expansion/augmentation only when there is no better optimal solution. RInfra-D added that bringing competition in retail supply activity will lead to greater efficiency in procurement, thus, optimizing a major component of final tariff (power purchase cost). This does not require bringing competition in wires activity as well. The benefits likely to be achieved by bringing competition in wires activity are equally well achieved even in single wires service, through better forms of Regulation. This way it could be ensured that, while on the one hand, greater efficiency and economy is brought in distribution operations and network management, the same does not come by compromising economies of scale and technical efficiency, which are best offered by keeping the wires service as “natural monopoly”. The words “distribution” and “supply” are markedly used to give clear distinction that “distribution” is wires business, i.e., maintaining distribution system and conveyance of electricity on the same, whereas, “supply” is retail sale business. Accordingly, RInfra-D requested the Commission to prevent duplication of distribution wires and bring in competition in retail supply activity only.

The Commission is of the view that the aforesaid issues raised are not within the scope of an APR and tariff order. These issues are therefore not adverted to in this order.

## **5.8 DEPRECIATION AND ADVANCE AGAINST DEPRECIATION**

### **5.8.1 Wire related depreciation**

The Commission, in its APR Order, had permitted depreciation expense for Wire Business to the extent of Rs. 59.31 Crore, which amounts to 2.60 % of Opening level of Gross Fixed Assets (GFA) of RInfra-D for FY 2009-10. The opening GFA was stated at Rs. 2277.85 Crore for FY 2009-10. The depreciation rates were considered as prescribed under MERC Tariff Regulations.

RInfra-D, in its APR Petition, submitted the revised estimate for depreciation expenses for Wire Business for FY 2009-10 and FY 2010-11 as Rs. 100.90 Crore and Rs. 107.72 Crore, respectively. Depreciation for FY 2009-10 has been claimed on opening GFA as well as on capitalisation during the year based on actual dates. However, for FY 2010-11, RInfra-D submitted that since the assets have been assumed to be added throughout the year, half year’s depreciation has been computed on assets projected to be added. RInfra-D in its Petition, confirmed that depreciation has not been claimed beyond 90% of the asset value in line with the MERC Tariff Regulations and no Advance against Depreciation has been claimed by RInfra-D.

For the purpose of computing depreciation for FY 2009-10, the asset addition during the year has been taken into account for which the month-wise asset addition details as submitted by RInfra-D was considered by the Commission.

As regards depreciation for FY 2010-11, the Commission has computed the same based on the average of Opening GFA and Closing GFA arrived at by considering the approved capitalisation for the year.

In view of the above and the capitalisation approved for FY 2009-10 and FY 2010-11, the depreciation expenditure as approved by the Commission for Wire Business, is summarised in the following Table:

**Table: Approved Depreciation Expenses (Wire Related)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by RInfra-D	Approved	Estimate by RInfra-D	Approved
<b>Wire Related</b>					
Depreciation	59.31	100.90	101.47	107.72	104.25
Opening GFA	2086.22	2581.93	2599.91	2947.07	2937.54
Closing GFA	2472.72	2947.07	2937.54	3312.90	3133.96

### **5.8.2 Retail Supply related depreciation**

The Commission, in its APR Order, had permitted depreciation expenses for Retail Supply business to the extent of Rs. 16.85 Crore, which amounts to 5.13% of Opening level of Gross Fixed Assets (GFA) of RInfra-D for FY 2009-10. The opening GFA was stated at Rs 328.68 Crore for FY 2009-10. The depreciation rates were considered as prescribed under MERC Tariff Regulations.

RInfra-D, in its APR Petition, submitted the revised estimate for depreciation expenses for FY 2009-10 and FY 2009-10 as Rs. 26.90 Crore and Rs. 28.48 Crore, respectively. Depreciation for FY 2009-10 has been claimed on opening GFA as well as on capitalisation during the year based on actual dates. However, for FY 2010-11, RInfra-D submitted that since it has to be assumed that assets would be added throughout the year, half year's depreciation has been computed on

assets projected to be added. RInfra-D, in its Petition, confirmed that depreciation has not been claimed beyond 90% of the asset value in line with the MERC Tariff Regulations and no Advance against Depreciation has been claimed by RInfra-D.

For the purpose of computing depreciation for FY 2009-10, the asset addition during the year has been taken into account for which the month-wise asset addition details as submitted by RInfra-D were considered by the Commission. As regards depreciation for FY 2010-11, the Commission has computed the same based on the average of Opening GFA and Closing GFA arrived at by considering the approved capitalisation for the year.

In view of the above and the capitalisation approved for FY 2009-10 and FY 2010-11, the depreciation expenditure as approved by the Commission for Retail Supply Business, is summarised in the following Table:

**Table: Approved Depreciation Expenses (Retail Supply) (Rs Crore)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by RInfra-D	Approved	Estimate by RInfra-D	Approved
Depreciation	16.85	26.90	12.39	28.48	18.99
Opening GFA	328.68	424.68	337.82	477.17	333.20
Closing GFA	315.33	477.17	333.20	498.56	328.58

Thus, total depreciation expense for RInfra-D (Wire + Retail Supply) is summarised in the following Table:

**Table: Approved Depreciation Expenses (Wire + Retail Supply) (Rs Crore)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by RInfra-D	Approved	Estimate by RInfra-D	Approved
Depreciation	76.16	127.80	113.86	136.20	123.24
Opening GFA*	2606.53	3006.61	2937.73	3424.24	3270.74
Closing GFA*	2788.04	3424.24	3270.74	3811.45	3462.54

(\*The revision in Opening GFA and Closing GFA for FY 2009-10 and FY 2010-11 is based on the revised approval of capitalisation for the previous years as well as on the approved capitalisation for the respective years.)

## 5.9 INTEREST EXPENSES

### 5.9.1 Wire related interest expense

The Commission, in its APR Order, had permitted wire related interest expense of Rs. 59.86 Crore for FY 2009-10, at a weighted average interest rate of 8.8%. Loan addition of Rs. 137.17 Crore was considered in the APR Order for FY 2009-10 corresponding to 70% of the assets capitalised during the year.

RInfra-D, in its APR Petition, submitted the revised estimate for interest expenses for FY 2009-10 and estimates for FY 2010-11 as Rs. 83.86 Crore and Rs. 99.34 Crore, respectively, as shown in the Table below:

*Table: Long-term Interest Expenses by RInfra-D (Wire related) (Rs Crore)*

Particulars	FY 2009-10		FY 2010-11
	APR Order	Revised Estimate by RInfra-D	Estimate by RInfra-D
<b>Wire Related</b>			
Opening Loan Balance	649.05	857.73	1035.50
Loan Addition	137.17	244.37	244.86
Loan Repayment	(68.21)	(66.60)	(78.85)
Closing Loan Balance	718.01	1035.50	1201.51
<b>Interest</b>	<b>59.86</b>	<b>83.86</b>	<b>99.34</b>
Overall Interest Rate	8.8%	8.9%	8.9%

RInfra-D submitted that it has deducted consumer contribution from the total capitalisation of the year to arrive at the net capitalisation, and 70% of such net capitalisation has been considered as normative debt for the purpose of computation of interest expenses for the year. For the above purpose, RInfra-D has considered the consumer contribution during FY 2009-10 and FY 2010-11 at the same level as actually received during FY 2008-09, which amounts to Rs 20.07 Crore and the same shall be adjusted at the time of truing up for these years. RInfra-D further submitted that the interest rate of 9% allowed by the Commission in the previous Order for FY 2008-09, has been considered for computing interest on long term capital for FY 2009-10 and FY 2010-11 as well.

As part of data gaps, Commission asked RInfra-D to submit data on the actual amount of consumer contribution for FY 2009-10, to which RInfra-D submitted that the consumer contribution of Rs. 20.07 Crore for FY 2009-10 has already been accounted while computing the RoE and interest on normative loans towards incremental capitalisation during that year.

Based on the submission in the Petition and subsequently in the reply to data gaps, it is observed that RInfra-D has not submitted the actual consumer contribution for FY 2009-10 and FY 2010-11. Hence the Commission has considered the estimated amount as submitted by RInfra-D for the present APR exercise. The same shall be revised upon submission of actual amount towards consumer contribution for FY 2009-10 and FY 2010-11 by RInfra-D during the final truing up of such year, subject to prudence check.

For the purpose of approving interest expense for FY 2009-10 and FY 2010-11, the Commission has considered the interest expense of the normative debt corresponding to net capitalisation adjusted for consumer contribution and has considered the interest rate of 10% p.a. for the assets put to use during FY 2004-05 and FY 2005-06 and interest rate of 8% p.a. for assets put to use during FY 2006-07 and FY 2007-08 in line with the principles adopted in the APR Order dated May 28, 2009. For FY 2008-09, the Commission has considered an interest rate of 9% in line with the rate considered in the previous APR Order. For FY 2009-10 and FY 2010-11 also, the interest rate of 9% has been considered. Accordingly, the approved interest expenses for Wire Business of RInfra-D during FY 2009-10 and FY 2010-11, are as shown in the following Table:

**Table: Long-term Interest Expenses by RInfra-D (Wire related) (Rs Crore)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by RInfra-D	Approved	Estimate by RInfra-D	Approved
<b>Wire Related</b>					
Opening Loan Balance	649.05	857.73	852.88	1035.50	1013.07
Loan Addition	137.17	244.37	225.12	244.86	126.27
Loan Repayment	(68.21)	(66.60)	(64.93)	(78.85)	(71.24)
Closing Loan Balance	718.01	1035.50	1013.07	1201.51	1068.10
<b>Interest</b>	<b>59.86</b>	<b>83.86</b>	<b>82.73</b>	<b>99.34</b>	<b>92.43</b>
Overall Interest Rate	8.8%	8.9%	8.9%	8.9%	8.9%

### **5.9.2 Retail Supply related interest expense**

The Commission, in its APR Order, had permitted Retail Supply related interest expense of Rs. 7.55 Crore for FY 2009-10, at a weighted average interest rate of 9.2 % for FY 2009-10. Loan addition considered for FY 2009-10 in the APR Order for FY 2009-10 was nil.

RInfra-D, in its APR Petition, submitted the revised estimate for interest expenses for FY 2009-10 and estimate for FY 2010-11 as Rs. 15.50 Crore and Rs. 16.89 Crore, respectively, as shown in the Table below:

*Table: Long-term Interest Expenses by RInfra-D (Retail Supply related) (Rs Crore)*

Particulars	FY 2009-10		FY 2010-11
	APR Order	Revised Estimate by RInfra-D	Estimate by RInfra-D
<b>Retail Related</b>			
Opening Loan Balance	88.26	156.64	183.82
Loan Addition	0.00	39.98	18.20
Loan Repayment	(13.01)	(12.80)	(13.71)
Closing Loan Balance	75.25	183.82	188.31
<b>Interest</b>	<b>7.55</b>	<b>15.50</b>	<b>16.89</b>
Overall Interest Rate	9.2%	9.1%	9.1%

RInfra-D submitted that it has deducted consumer contribution from the total capitalisation of the year to arrive at the net capitalisation, and 70% of such net capitalisation has been considered as normative debt for the purpose of computation of interest expenses for the year. For the above purpose, RInfra-D has considered the consumer contribution during FY 2009-10 and FY 2010-11 at the same level as actually received during FY 2008-09, which amounts to Rs 20.07 Crore. RInfra-D further submitted that the interest rate of 9% allowed by the Commission in the previous Order for FY 2008-09, has been considered for computing interest on long term capital for FY 2009-10 and FY 2010-11 as well.

For the purpose of approving interest expense for FY 2009-10 and FY 2010-11, the Commission has considered the interest expense of the normative debt corresponding to net capitalisation adjusted for consumer contribution and has considered the interest rate of 10% p.a. for the assets put to use during FY 2004-05 and FY 2005-06 and interest rate of 8% p.a. for assets put to use during FY 2006-07 and FY 2007-08 in line with the principles adopted in the APR Order dated



May 28, 2009. For FY 2008-09, the Commission has considered an interest rate of 9% in line with the rate considered in the previous APR Order. For FY 2009-10 and FY 2010-11 also, the interest rate of 9% has been considered. Accordingly, the approved interest expenses for Retail Supply of RInfra-D during FY 2009-10 and FY 2010-11, are as shown in the following Table:

**Table: Long-term Interest Expenses by RInfra-D (Retail Supply related) (Rs Crore)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by RInfra-D	Approved	Estimate by RInfra-D	Approved
<b>Retail Supply Related</b>					
Opening Loan Balance	88.26	156.64	117.09	183.82	107.99
Loan Addition	0.00	39.98	0.00	18.20	0.00
Loan Repayment	(13.01)	(12.80)	(9.10)	(13.71)	(9.10)
Closing Loan Balance	75.25	183.82	107.99	188.31	98.88
<b>Interest</b>	<b>7.55</b>	<b>15.50</b>	<b>10.23</b>	<b>16.89</b>	<b>9.38</b>
Overall Interest Rate	9.2%	9.1%	9.1%	9.1%	9.1%

Thus, the approved interest expenses for Wire and Retail Supply of RInfra-D during FY 2009-10 and FY 2010-11, are as shown in the following Table:

**Table: Approved Long-term Interest Expenses (Wire + Retail Supply) (Rs Crore)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by RInfra-D	Approved	Estimate by RInfra-D	Approved
<b>Wire and Retail Supply Related</b>					
Opening Loan Balance	737.30	1014.37	969.97	1219.32	1121.06
Loan Addition	137.17	284.35	225.12	263.06	126.27
Loan Repayment	(81.23)	(79.41)	(74.03)	(92.56)	(80.35)
Closing Loan Balance	793.25	1219.32	1121.06	1389.82	1166.98
<b>Interest</b>	<b>67.41</b>	<b>99.36</b>	<b>92.96</b>	<b>116.24</b>	<b>101.81</b>
Overall Interest Rate	8.8%	8.9%	8.9%	8.9%	8.9%

## 5.10 INTEREST ON WORKING CAPITAL AND CONSUMERS' SECURITY DEPOSIT FOR FY 2009-10 AND FY 2010-11

RInfra-D has estimated the Interest on Working Capital (IWC) considering interest rate at 13.00% for FY 2009-10 as per the components considered in the Tariff Regulations, with the revised IWC estimated at Rs. 55.93 Crore as against Rs. 68.14 Crore approved by the Commission, for the Wire Business and Supply Business combined. For FY 2010-11, RInfra-D estimated the interest on working capital, considering interest rate as 11.75%, as Rs. 52.48 Crore, for the Wire Business and Supply Business combined.

RInfra-D added that in accordance with the ruling of the ATE, RInfra-D has not considered any payables to RInfra-G towards the power procured from it, while computing the working capital requirement for the Distribution Business.

RInfra has projected the interest on consumers' security deposits for the Supply Business at the interest rate of 6.0% for FY 2009-10 and FY 2010-11. RInfra-D, in its reply to the Commission's query regarding actual Consumers Security Deposit for FY 2009-10 submitted the following particulars:

*Table: Consumers Security Deposit for FY 2009-10 submitted by RInfra-D*

Particulars	Rs Crore
Opening Balance for Consumer Security Deposit	297.16
Closing Balance for Consumer Security Deposit	313.81
Average Balance for Consumer Security Deposit (Average of CSD on last day of each month)	325.96

The Commission observed that RInfra-D, while calculating "One Month Equivalent of cost of power" component in the computation of Interest on Working Capital (IoWC), has considered power purchase cost excluding power purchase cost from RInfra-G. The Commission has accepted the methodology and excluded the cost of power purchase from RInfra-G while reducing the power purchase cost, while computing the working capital requirement, in accordance with the ATE Judgment discussed in Section 3.1 of this Order.

The Commission has considered the consumers' security deposits of Rs 325.96 Crore for FY 2009-10 as submitted by RInfra-D in reply to data gaps. For projecting the interest on Security Deposit, no increase in consumer security deposit has been considered by RInfra-D for FY 2010-11, however, the Commission has considered an increase of 10% in the quantum of Security Deposit for FY 2010-11.

The Commission has estimated the working capital requirement of RInfra-D for FY 2009-10 after considering the provisional truing up of various expenditure heads. The MERC Tariff Regulations stipulate that the rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on the date on which the application for determination of tariff is made. As the application for determination of tariff for FY 2009-10 was made on December 15, 2008, the Commission has considered the short-term Prime Lending Rate of State Bank of India of 13.00% prevalent at that time for estimating the interest on working capital. For FY 2010-11, the Commission has estimated the working capital requirement of RInfra-D after considering the revised expenditure approved in this Order. The Commission has considered the interest rate as 11.75% as submitted by RInfra-D. The revised interest on working capital for RInfra-D for FY 2009-10 and FY 2010-11, is given in the following Table:

As regards computation of interest on consumers' security deposit, the Commission has accepted 6% interest as submitted by RInfra-D on the consumers' security deposit approved by the Commission.

**Table: Interest on Working Capital and Consumers' Security Deposit for FY 2009-10 and FY 2010-11 (Rs. Crore)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by RInfra-D	Approved After provisional truing up	Estimate by RInfra-D	Approved
Interest on Working Capital	68.14	55.93	50.65	52.49	38.84
Interest consumer security deposits		17.15	19.56	17.15	21.51

#### **5.11 CONTRIBUTION TO CONTINGENCY RESERVES FOR FY 2009-10 AND FY 2010-11**

RInfra-D submitted that the contribution to contingency reserves has been computed at 0.25% of opening GFA in accordance with the MERC Tariff Regulations, as Rs. 7.42 Crore against Rs. 6.52 Crore approved by the Commission in the APR Order. Further, for FY 2010-11, RInfra-D submitted that the contingency reserves have been projected at the same rate, which works out to

Rs. 8.46 Crore. In this regard, the MERC (Terms and Conditions of Tariff) Regulations, 2005 stipulates:

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

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

The Commission has provided for contingency reserves @ 0.25% of opening GFA for FY 2009-10 and FY 2010-11, after considering the approved capitalisation for the corresponding years, as discussed in earlier paragraphs.

The approved contribution to contingency reserves for RInfra-D for FY 2009-10 and FY 2010-11 is given in the following Table:

**Table: Contribution to Contingency Reserves for FY 2008-09 and FY 2009-10 (Rs. Crore)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate by RInfra-D	Approved after provisional truing up	Estimate by RInfra-D	Approved
Contribution to Contingency Reserves	6.52	7.42	7.34	8.46	8.18

## 5.12 PROVISIONING FOR BAD DEBTS

RInfra-D submitted that it created a provision of Rs. 13.56 Crore for bad debts as against Rs. 5.50 Crore approved by the Commission for FY 2009-10. Similarly for FY 2010-11, RInfra has considered Rs. 5.00 Crore as Provision for Bad Debts.

For FY 2009-10, RInfra-D has created a provision of Rs. 13.56 Crore, which amounts to 2.62% of receivables; however, the Commission has allowed 1.5% of receivables at Rs. 7.75 Crore as

allowed in previous Orders. The Commission will undertake final truing up for FY 2009-10 based on Audited Accounts and prudence check.

For FY 2010-11, the Commission has considered Rs. 5.00 Crore as provision for Bad Debts as submitted by RInfra-D.

### **5.13 INCOME TAX FOR FY 2009-10 AND FY 2010-11**

For FY 2009-10, the Commission had approved Rs. 34.65 Crore as Income Tax in its APR Order for FY 2008-09. RInfra-D submitted that for FY 2009-10 and FY 2010-11, the income tax has been estimated at the prevalent corporate tax rate of 33.99%, and works out to Rs. 107.18 Crore and Rs. 118 Crore, respectively, for Wires Business and Rs. 35 Crore and Rs. 34 Crore, respectively, for retail business. Further, RInfra-D added that it has computed Income Tax for FY 2009-10 and FY 2010-11 after grossing up RoE by Income Tax rate.

RInfra-D has computed income tax by grossing up the RoE, adding back the regulatory depreciation and reducing Tax depreciation on WDV basis under provisions of the Income Tax Act. RInfra-D has also added back the normative interest on loan and normative interest on working capital to the taxable income while computing the income tax.

As discussed in Section 4.13 of this Order, the Commission has computed the Income Tax for FY 2009-10 and FY 2010-11 by considering the Return on Equity as the Profit before Tax, in line with the ATE Judgment in Appeal No. 174 of 2009. The Commission has grossed up the RoE with the income tax rate to arrive at taxable profit before tax in accordance with the ATE Judgment, however, incentive and efficiency gains have not been added at this stage since the same will be considered at the time of final truing up.

For FY 2009-10, the Commission has added normative interest on long-term loans as well as the normative interest on working capital loan to the RoE, since there has been no actual interest expense under these two heads. While computing income tax for FY 2010-11, normative interest on long-term loans has been added to the RoE, however, the normative interest on working capital loan has not been added to the RoE, since it is not possible to project the exact actual interest expense that will be incurred by RInfra-D. Depending on the actual interest on working capital incurred by RInfra-D, only the difference between the normative interest and actual interest, and that too, only if the actual interest is lower than the normative interest on working

capital, will have to be added to the RoE, for computing the Income Tax. Hence, this can be considered at the time of final truing up.

The income tax projected by RInfra-D in its APR Petition, and the income tax estimated by the Commission for FY 2009-10 and FY 2010-11 is shown in the Table below. The Commission will however, true up the income tax, based on final truing up for FY 2009-10 and FY 2010-11.

**Table: Income Tax approved by the Commission** (Rs Crore)

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Revised Estimate	Approved After provision al truing up	Estimate	Approved
Profit Before Tax (PBT)	176.69	210.05	204.71	228.82	216.76
PBT, grossed up by Income Tax rate		314.54	306.55	342.65	324.59
Add: Depreciation as per APR	76.16	127.80	113.86	136.20	123.24
Less: Depreciation as per Income Tax	-218.31	(197.67)	(197.67)	(218.89)	(218.89)
Add: Normative Interest on Long Term Loan	67.41	99.36	92.96	116.24	101.81
Add: Normative Interest on Working Capital	-	73.08	50.65	69.63	-
<b>Total</b>	<b>101.95</b>	<b>417.11</b>	366.35	<b>445.83</b>	<b>330.75</b>
<b>Income Tax on Total</b>	<b>34.65</b>	<b>141.78</b>	121.70	<b>151.54</b>	<b>109.88</b>

#### 5.14 NON-TARIFF INCOME FOR FY 2009-10 AND FY 2010-11

RInfra-D submitted that the Non-Tariff Income for FY 2009-10 is estimated at Rs. 14.37 Crore for Wire Business and Rs. 97.15 Crore for Retail Supply Business, as against Rs. 88.41 Crore approved by the Commission in the APR Order. For FY 2010-11, RInfra-D estimated Non-Tariff Income as at Rs. 15.23 Crore for Wire Business and Rs. 103 Crore for Retail Supply Business. RInfra submitted that it is difficult to predict the movement of items under non-tariff income and hence, no specific growth pattern has been considered.

The Commission observed that RInfra-D has not included interest on delayed payment in the computation of Non-Tariff Income. As elaborated in the detailed APR Order dated June 15, 2009, the Commission has considered Interest on delayed payment under Non-Tariff Income for the purpose of truing up, which has not been considered by RInfra-D in its submission.

In reply to datagaps, RInfra-D has submitted the amount of interest on delayed payment as Rs. 10.45 Crore for FY 2009-10 and Rs. 6.58 crore for FY 2010-11. The Commission has considered interest on delayed payment of Rs. 10.45 Crore for FY 2009-10 and a 10% increase has been considered for FY 2010-11, amounting to Rs. 11.50 Crore.

RInfra-D, in its projections, has not considered income from rent for Retail Supply Business for FY 2009-10 and FY 2010-11, though the same is included in FY 2008-09 under Non-Tariff Income. The Commission has considered income from rent for FY 2009-10 and FY 2010-11 with an annual escalation of 6% as considered by RInfra-D for Wires Business.

Further, for FY 2009-10 and FY 2010-11, additional interest has been projected at 7% on the incremental contingency reserves, in addition to the interest on the existing contingency reserves.

Accordingly, Non-Tariff Income considered by the Commission for FY 2009-10 and FY 2010-11 is as shown in the Table below:

**Table: Non Tariff Income** **(in Rs. Crore)**

Particulars	FY 2009-10			FY 2010-11	
	MYT Order	Revised Estimate by RInfra	Approved After provisional truing up	Estimate by RInfra	Approved
Non-Tariff Income	51.81	111.37	126.01	118.04	134.05

### 5.15 INCOME FROM OTHER BUSINESS FOR FY 2010-11

RInfra-D submitted that it has leased out portions of twenty of its substation premises to Reliance Communications Ltd. (RCOM) for the purpose of installation of RCOM's Cellular Radio Base Station Antenna (BTS Tower) at Rs.3,52,344 per tower per annum effective from July 2010. Accordingly, RInfra-D estimated an income of Rs. 50 Lakh from the above during FY 2010-11, and shown one-third of the total income from lease rent, i.e., about Rs. 17 Lakh under

“Income from Other Business” for FY 2010-11 and hence, deducted the same from the ARR of FY 2010-11.

The Commission has considered the submission of RInfra-D.

### 5.16 RETURN ON EQUITY (ROE)

RInfra-D, in its APR Petition, submitted that the RoE has been calculated in accordance with the MERC Tariff Regulations, 2005, at 16% on the regulatory equity at the beginning of the year and on 50% of equity funded capitalization during the year. RInfra-D further submitted that normative equity for calculating ROE has been computed considering 30% of the net capitalisation, adjusted for consumer contribution.

#### *Wire Related ROE*

For FY 2009-10, RInfra-D claimed RoE of Rs. 187.58 Crore as against Rs. 159.63 Crore approved by the Commission in its earlier Tariff Order for Wire Business. For FY 2010-11, RInfra-D has estimated Rs. 204.36 Crore as RoE for Wire Business.

In view of revised capitalisation approved by the Commission in this Order and the net capitalisation adjusted for consumer contribution, the Commission has computed the RoE for FY 2009-10 and FY 2010-11 for the Wire Business of RInfra-D. The following table shows the Wire related ROE estimated by RInfra-D and that approved by the Commission for FY 2009-10 and FY 2010-11.

*Table: Wire Related ROE*

*(Rs Crore)*

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Estimate by RInfra	Approved	Estimate by RInfra	Approved
Regulated Equity at beginning of year	968.32	1120.04	1113.91	1224.77	1210.40
Equity Portion of Capitalised Expenditure	58.79	104.73	96.48	104.94	54.12
Regulated Equity at the end of the year	1027.11	1224.77	1210.40	1329.71	1264.51
Return on Regulated Equity at beginning of year	154.93	179.21	178.23	195.96	193.66



Particulars	FY 2009-10			FY 2010-11	
	APR Order	Estimate by RInfra	Approved	Estimate by RInfra	Approved
Return on Equity Portion of Capital Expenditure Capitalised	4.70	8.38	7.72	8.40	4.33
<b>Total Return on Regulated Equity</b>	<b>159.63</b>	<b>187.58</b>	<b>185.94</b>	<b>204.36</b>	<b>197.99</b>

### *Retail Supply Related ROE*

For FY 2009-10, RInfra-D claimed RoE of Rs. 22.47 Crore as against Rs. 17.06 Crore approved by the Commission in its earlier Tariff Order for Retail Supply Business. For FY 2010-11, RInfra-D has estimated Rs. 24.46 Crore as RoE for Retail Supply Business.

In view of revised capitalisation approved by the Commission in this Order and the net capitalisation adjusted for consumer contribution, the Commission has computed the RoE for FY 2009-10 and FY 2010-11 for Retail Supply Business of RInfra-D. The following table shows the Retail Supply related ROE estimated by RInfra-D and that approved by the Commission for FY 2009-10 and FY 2010-11.

*Table: Retail Supply Related ROE*

*(Rs Crore)*

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Estimate by RInfra	Approved	Estimate by RInfra	Approved
Regulated Equity at beginning of year	106.61	131.84	117.29	148.98	117.29
Equity Portion of Capitalised Expenditure	0.00	17.13	0.00	7.80	0.00
Regulated Equity at the end of the year	106.61	148.98	117.29	156.78	117.29
Return on Regulated Equity at beginning of year	17.06	21.09	18.77	23.84	18.77
Return on Equity Portion of Capital Expenditure Capitalised	0.00	1.37	0.00	0.62	0.00
<b>Total Return on Regulated Equity</b>	<b>17.06</b>	<b>22.47</b>	<b>18.77</b>	<b>24.46</b>	<b>18.77</b>

Thus, total Return on Equity for RInfra-D business (Wire + Retail Supply) is summarised under the following Table:

**Table: Return on Equity (Wire+Retail Supply) (Rs Crore)**

Particulars	FY 2009-10			FY 2010-11	
	APR Order	Estimate by RInfra	Approved	Estimate by RInfra	Approved
Regulated Equity at beginning of year	1074.93	1251.88	1231.21	1373.75	1327.69
Equity Portion of Capitalised Expenditure	58.79	121.86	96.48	112.74	54.12
Regulated Equity at the end of the year	1133.72	1373.75	1327.69	1486.49	1381.80
Return on Regulated Equity at beginning of year	171.99	200.30	196.99	219.80	212.43
Return on Equity Portion of Capital Expenditure Capitalised	4.70	9.75	7.72	9.02	4.33
<b>Total Return on Regulated Equity</b>	176.69	210.05	204.71	228.82	216.76

### **5.17 REVENUE FROM SALE OF ELECTRICITY FOR FY 2009-10 AND FY 2010-11 FROM EXISTING TARIFFS**

RInfra-D submitted that the Commission, vide its Order dated July 15, 2009 applied a partial stay on the tariff rates of RInfra-D as approved by the Commission vide its Tariff Order dated June 15, 2009. Further, the Commission ordered an investigation on RInfra-D's Distribution Business under Section 128 of the EA 2003 and appointed M/s ASCI as the Investigating Authority for the purpose. The Investigation Authority submitted its Report to the Commission on July 9, 2010, and pursuant to the Report, the Commission vide its Order dated September 9, 2010 passed an Order vacating the partial stay from September 2010 onwards.

RInfra-D submitted that since the approved tariffs remained partially stayed throughout FY 2009-10, the revenue realised is much lower as compared to the Commission approved figures in the Tariff Order. Further, RInfra-D added that the change-over of consumers to TPC-D has also resulted in reduction in the revenue realisation. For FY 2010-11, RInfra-D submitted that it charged its consumers from April 2010 to August 2010 at the rate specified in the Stay Order

dated July 15, 2009. During September 2010, RInfra-D charged its consumers at tariff rates specified in Tariff Order dated June 15, 2009.

RInfra-D submitted that the revenues for the period from October 2010 to March 2011 are estimated using projected sales and tariff rates specified in the abovementioned Tariff Order. Further, for the purpose of working out sales for the period October 2010 to March 2011, RInfra-D subtracted the actual sales as billed during the first six months from the total projected RInfra-D sales for FY 2010-11.

**Table: Sales Revenue** **(in Rs. Crore)**

Particulars	FY 2009-10		FY 2010-11* (Actual for Apr 2010 to Sept 2010 and estimated for Oct 2010 to Mar 2011)
	MERC approved	Actual	
Total Revenue	6,122.00	5,086.41	4832.60

RInfra-D submitted that the actual revenues have fallen short by about Rs. 1,035.59 Crore in FY 2009-10 due to partial stay on retail tariffs. Further, the revenues during FY 2010-11 have reduced by more than Rs. 230 Crore due to stay on the tariff rates in the first five months of FY 2010-11 and also due to consumer migration. RInfra-D added that the majority of migrating sales volume comes from subsidizing categories, which caused a much larger reduction in revenues as compared to reduction in power purchase costs.

RInfra-D added that the revenue from wheeling charges for FY 2010-11 at existing Tariffs works out to Rs. 97.38 Crore, as shown in the Table below:

**Table: Wheeling Revenue submitted by RInfra-D**

Voltage Level	Wheeling Tariff (Rs. Per unit)	Wheeling Sales (At T<>D) (MU)	Revenue (in Rs. Crore)
HT wheeling	0.46	533	24.52
LT wheeling	0.88	828	72.86
<b>Total</b>		<b>1361</b>	<b>97.38</b>

Hence, RInfra-D submitted that the total revenue for FY 2010-11 at existing Tariffs work out to Rs. 4929.99 Crore.

For FY 2009-10, the Commission has considered the actual revenue earned by RInfra-D from sale of electricity during the year, which was submitted by RInfra-D as Rs. 5086.41 Crore. The

same has been accepted by the Commission under the provisional truing up exercise, for computing the revenue gap/ (surplus) for FY 2009-10, as discussed in the next sub-section. Based on audited results, the Commission will true up the actual expenses and revenue for FY 2009-10, subject to prudence check.

For FY 2010-11, the Commission sought the details of actual revenue earned by RInfra-D from sale of electricity for the first ten months of the year. RInfra-D submitted the data of actual category-wise sales and revenue earned by RInfra-D for the ten-month period from April 2010 to January 2011, which has been extrapolated by the Commission to determine the revenue for the entire FY 2010-11 as Rs. 4476.75 Crore.

The Commission approved network related aggregate revenue requirement for RInfra-D for FY 2009-10 amounts to Rs. 869.94 Crore. The revenue from wheeling charges for FY 2009-10 at existing Tariffs works out to Rs. 15.26 Crore.

The Commission approved network related aggregate revenue requirement for RInfra-D for FY 2010-11 amounts to Rs. 843.27 Crore. The revenue from wheeling charges for FY 2010-11 at existing Tariffs works out to be Rs. 97.38 Crore.

**Table: Aggregate Revenue Requirement for Wires & Supply Business for FY 2009-10 (Rs Crore)**

Particulars	Supply Business		Wires Business	
	RInfra-D	Commission	RInfra-D	Commission
Power Purchase Expenses	4,211.90	4,211.90	0.00	0.00
Operation & Maintenance Expenses	190.08	188.07	437.16	434.21
Employee Expenses	139.62	137.61	204.80	201.84
Administration & General Expenses	44.21	44.21	80.77	80.77
Repair & Maintenance Expenses	6.25	6.25	151.60	151.60
Depreciation, including advance against depreciation	26.90	12.39	100.90	101.47
Interest on Long-term Loan Capital	15.50	10.23	83.86	82.73
Interest on Working Capital and on consumer security deposits	57.34	54.51	15.73	15.70
Bad Debts Written off	13.56	7.75	0.00	0.00
Other Expenses	25.00	0.00	0.00	0.00
Income Tax	34.60	17.96	107.18	103.74
Transmission Charges intrastate	183.73	183.72	0.00	0.00
Contribution to contingency reserves	0.97	0.84	6.45	6.50

Particulars	Supply Business		Wires Business	
	RInfra-D	Commission	RInfra-D	Commission
Adjustment for profit/loss on account controllable/uncontrollable factors				
Total Revenue Expenditure	4,759.59	4,687.38	751.29	744.35
Return on Equity Capital	22.47	18.77	187.58	185.94
Aggregate Revenue Requirement	4,782.06	4,706.15	938.88	930.29
Less: Non Tariff Income	97.15	111.64	14.37	14.37
Less: Income from wheeling charges	0.00	0.00	15.26	15.26
Less: Income from Other Business	0.00	0.00	0.00	0.00
Add: Efficiency Gains for distribution loss reduction	58.75	0.00	0.00	0.00
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>4,743.65</b>	<b>4,594.51</b>	<b>909.25</b>	<b>900.67</b>

*Table: Aggregate Revenue Requirement for Wires & Supply Business for FY 2010-11 (Rs Crore)*

Particulars	Supply Business		Wires Business	
	RInfra-D	Commission	RInfra-D	Commission
Power Purchase Expenses	3,820.16	3,559.49	0.00	0.00
Operation & Maintenance Expenses	207.77	202.18	501.91	467.49
Employee Expenses	153.83	148.24	228.61	220.29
Administration & General Expenses	47.32	47.32	86.44	86.44
Repair & Maintenance Expenses	6.62	6.62	186.87	160.77
Depreciation, including advance against depreciation	28.48	18.99	107.72	104.25
Interest on Long-term Loan Capital	16.89	9.38	99.34	92.43
Interest on Working Capital and on consumer security deposits	52.60	43.65	17.03	16.70
Bad Debts Written off	5.00	5.00	0.00	0.00
Other Expenses	0.00	0.00	0.00	0.00
Income Tax	33.86	7.14	117.68	102.74
Transmission Charges intrastate	214.13	214.13	0.00	0.00
Contribution to contingency reserves	1.10	0.83	7.37	7.34
Adjustment for profit/loss on account controllable/uncontrollable factors	0.00	0.00	0.00	0.00
Total Revenue Expenditure	4,379.99	4,060.00	851.06	790.95
Return on Equity Capital	24.46	18.77	204.36	197.99
Aggregate Revenue Requirement	4,404.45	4,078.76	1,055.41	988.94
Less: Non Tariff Income	102.81	118.48	15.23	15.57

Particulars	Supply Business		Wires Business	
	RInfra-D	Commission	RInfra-D	Commission
Less: Income from wheeling charges	0.00	0.00	97.38	97.38
Less: Income from Other Business	0.17	0.00	0.00	0.00
Add: Efficiency Gains for distribution loss reduction	0.00	0.00	0.00	0.00
<b>Aggregate Revenue Requirement from Retail Tariff</b>	<b>4,301.47</b>	<b>3,960.29</b>	<b>942.81</b>	<b>875.99</b>

### 5.18 AGGREGATE REVENUE REQUIREMENT OF RINFRA-D FOR FY 2009-10 AND FY 2010-11

Based on analysis of each element discussed above, the Aggregate Revenue Requirement of RInfra-D for FY 2009-10 and FY 2010-11 as approved by the Commission in its respective APR, as estimated by RInfra-D in the APR Petition and as approved by the Commission in this Order is given in the following Tables:

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

S. No.	Particulars	Tariff Order dated June 15, 2009	Revised Estimate RInfra-D	Commission
1	Power Purchase Expenses	4,418.45	4,211.90	4,211.90
2	Additional Energy Charges payment to TPC	0	25	0.00
3	Transmission Charges	183.7	183.73	183.72
4	O&M Expenses	566.82	627.25	622.27
5	Employee Expenses	306.62	344.43	339.45
6	A&G Expenses	111.73	124.98	124.98
7	R&M Expenses	148.47	157.84	157.84
8	Depreciation	76.16	127.8	113.86
9	Interest on Long-term Loan Capital	67.41	99.36	92.96
10	Interest on Working Capital	68.14	73.08	70.21
11	Provisioning for Bad Debts	5.5	13.56	7.75
12	Income Tax	34.65	141.78	121.70
13	Contribution to Contingency Reserves	6.52	7.42	7.34
14	Total Revenue Expenditure	5,427.37	5,510.88	5,431.73

S. No.	Particulars	Tariff Order dated June 15, 2009	Revised Estimate RInfra-D	Commission
15	Return on Equity Capital	176.69	210.05	204.71
16	Less: Non Tariff Income	88.41	111.52	126.01
17	Add: Efficiency Gains for FY 2010		58.75	
18	Aggregate Revenue Requirement	5,515.65	5,668.15	5,510.43

Based on provisional triuing up of various elements for FY 2009-10 as discussed in above paragraphs, the Aggregate Revenue Requirement for FY 2009-10 works out to Rs. 5510.43 Crore as against the amount of Rs. 5515.65 Crore approved in the APR Order.

The Commission will undertake sharing of gain and losses and prudence check based on Audited Accounts.

The revised ARR approved for FY 2009-10 is lower than that projected by RInfra-D, due to the following reasons:

- Slight reduction in O&M expenses, as justification for certain heads under employee expenses was not submitted
- Reduction in approved Capitalisation for FY 2009-10, as the Commission has not considered capitalisation of schemes pending approval.
- Reduction in Asset related costs due to reduction in capitalisation.
- Disallowance of other expense of Rs. 25 Crore for the time-being, deposited in accordance with the Hon'ble Supreme Court Order
- Reduction in provision for Bad Debts for FY 2009-10, as only 1.5% of receivables have been allowed.
- Increase in approved Interest on Consumer Security Deposit for FY 2009-10 as the Commission has considered higher Consumer Security Deposit
- Increase in Non- tariff Income for FY 2009-10 on account of inclusion of rent, interest on delayed payment and additional interest on the incremental contingency reserves
- Non-inclusion of efficiency gains in the current Order

The Net Revenue Requirement for FY 2010-11 is shown in the Table below:

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

Sl.	Particulars	FY 2010-11	
		RInfra-D	Commission
1	Power Purchase Expenses	3,820.16	3,559.49
2	Operation & Maintenance Expenses	709.68	669.67
2.1	Employee Expenses	382.44	368.52
2.2	Administration & General Expenses	133.75	133.75
2.3	Repair & Maintenance Expenses	193.49	167.39
3	Depreciation, including advance against depreciation	136.2	123.24
4	Interest on Long-term Loan Capital	116.24	101.81
5	Interest on Working Capital and on consumer security deposits	69.64	60.36
6	Bad Debts Written off	5	5.00
7	Income Tax	151.54	109.88
8	Transmission Charges intra-State	214.13	214.13
9	Contribution to contingency reserves	8.46	8.18
<b>10</b>	<b>Total Revenue Expenditure</b>	<b>5,231.05</b>	<b>4,850.95</b>
11	Return on Equity Capital	228.82	216.76
<b>12</b>	<b>Aggregate Revenue Requirement</b>	<b>5459.87</b>	<b>5,067.71</b>
13	Less: Non Tariff Income	118.04	134.05
14	Less: Income from wheeling charges	97.38	97.38
15	Less: Income from Other Business	0.17	0.17
<b>16</b>	<b>Aggregate Revenue Requirement from Retail</b>	<b>5,244.28</b>	<b>4,836.11</b>

The revised ARR approved for FY 2010-11 is lower than that projected by RInfra-D, due to the following reasons:

- Reduction in sales and power purchase quantum based on actuals.
- Reduction in approved capitalisation for FY 2010-11, as schemes pending approval have not been considered.
- Reduction in asset related costs due to reduction in capitalisation.



- Reduction in approved Income Tax for FY 2010-11, as normative Interest on Working Capital has not been considered to project Income Tax liability.
- Increase in approved Interest on Consumer Security Deposit for FY 2010-11 as the Commission has considered higher Consumer Security Deposit for base year FY 2009-10
- Increase in Non-tariff Income for FY 2009-10 on account of inclusion of rent, interest on delayed payment and additional interest on the incremental contingency reserves.

## **6 TARIFF PHILOSOPHY AND CATEGORY-WISE TARIFFS FOR FY 2010-11**

### **6.1 TREATMENT OF REVENUE GAP PROPOSED BY RINFRA-D FOR FY 2010-11**

RInfra-D submitted that the revenue gap of FY 2009-10 of Rs. 1,173.14 Crore is mainly on account of the stay on retail tariff. RInfra-D submitted that in addition to the above, there are Regulatory Assets worth Rs. 178 Crore and Rs. 554 Crore approved by the Commission vide its Tariff Order for FY 2009-10. RInfra-D submitted that the impact of ATE Judgment for FY 2006-07 and FY 2007-08 and additional capitalization in FY 2007-08 and the additional impact of consumer contribution adjustment, is as such related to past periods.

RInfra-D added that the revenue gap/regulatory assets shown above do not include carrying cost, as RInfra-D is not proposing to recover these costs in FY 2010-11. Further, RInfra-D added that these costs would attract carrying cost as well, when allowed for recovery from tariffs, depending upon the year of accrual and up to year of recovery.

The Commission has considered the revenue gap for FY 2008-09, FY 2009-10 and FY 2010-11 as approved by the Commission in the previous sections of this Order, including the impact of ATE Judgment for FY 2006-07 and FY 2007-08 and additional capitalization in FY 2007-08 and the additional impact of consumer contribution adjustment as discussed in Section 3 of this Order. The Commission has accepted the submission of RInfra-D relating to recovery of regulatory assets approved by the Commission in the previous Tariff Order.

The Commission has not included carrying cost, as RInfra-D is not proposing to recover these costs in FY 2010-11. However, such cost of carrying will be considered when recovery from tariffs will be allowed, depending upon the year of accrual and up to year of recovery at SBI PLR for the respective years.

The summary of revenue gaps/under-recoveries as submitted by RInfra-D and approved by the Commission is shown below:

**Table: Cumulative Revenue Gap**

<b>Revenue Gap</b>	<b>RInfra</b>	<b>Commission</b>
Incremental Revenue Gap of FY 2008-09	297.55	95.60
Incremental Revenue Gap of FY 2009-10	1173.13	1015.41
Regulatory Assets (approved)	732.00	732.00
		90.70
Impact of ATE Order	149.95	
Impact of Adjustment of Consumer Contribution and Additional Capitalisation	23.49	23.15
<b>Total Revenue Gap upto FY 2009-10</b>	<b>2376.12</b>	<b>1956.85</b>
Revenue gap for FY 2010-11	411.67	359.35
<b>Total Gap</b>	<b>2787.80</b>	<b>2316.21</b>

## 6.2 TARIFF PROPOSAL PRINCIPLES

### 6.2.1 Wheeling Charges proposed for FY 2010-11

RInfra-D submitted that the stand-alone total ARR for Wires Business of RInfra-D for FY 2010-11 has been distributed between HT and LT voltage levels on the basis of the GFA ratio at HT/LT. The expenses so identified as associated with HT have been further shared between HT and LT on the basis of estimated energy sales at these levels. The estimated energy sales is the sum of energy sales of change-over consumers and own consumers.

RInfra-D submitted that Wheeling Charges may continue to be denominated in terms of Rs/kWh for ease of implementation as specified by the Commission through its Clarificatory Order dated July 22, 2009.

The wheeling charges projected by RInfra-D using the above method are as under:

**Table: Wheeling Charges proposed by RInfra-D**

<b>Particulars</b>	<b>HT</b>	<b>LT</b>
Allocated wires cost (Rs. Crore)	65.02	975.17
Energy sales (MU) – own	513.92	7360.76
Energy billed (MU) – changeover	533.00	828.00

Total Energy - billed to change-over and sales to own consumers (MU)	1046.92	8188.76
Wheeling charges for use of RInfra-D System for FY 2010-11	0.62	1.19

RInfra-D requested the Commission to consider separate truing-up of Wires cost and Retail Supply costs of the distribution licensee.

RInfra-D submitted that the under-recovery in Wires cost could be determined using the ‘per unit allocated wires cost’ and actual sales of each category and comparing the sum-product of these with the actual Wires cost, represented mathematically as under:

$$(\text{Actual Distribution Wires costs}) - (\text{WHT} * \text{SHT} + \text{WLT} * \text{SLT}),$$

where, WHT is the allocated per unit wires cost at HT level (or wheeling charges at HT level); SHT is the energy in MU at HT level, which is the sum of actual doorstep sales of own consumers and actual energy billed to change-over consumers; WLT is the allocated per unit wires cost at LT level (or wheeling charges at LT level); and SLT is the energy in MU at LT level.

The Commission will bear this suggestion of RInfra-D in mind, at the time of truing up for FY 2010-11. However, the Commission has not re-determined the Wheeling Charges for FY 2010-11, since the year has been completed.

### **6.2.2 Cost and tariff unbundling**

RInfra-D submitted that change-over consumers use Wires Distribution Licensee’s network and Supply Distribution Licensee’s supply, while own consumers use both network and supply of the same Distribution Licensee. Hence, cost of network and losses, which are different for different networks, needs to be identified separately for own consumers and change-over consumers. RInfra-D added that when cost elements are identified separately, cost allocated to own consumers and change-over consumers would be different due to different network cost and different losses of the two licensees. Consequently, the tariffs of the two types of consumers would also be different to the extent of difference in allocated cost.

RInfra-D proposed that going forward for parallel licence areas, such cost and tariff unbundling may be considered by the Commission to ensure fair allocation of costs and tariffs representing actual cost incidence.

These issues are being addressed separately under parallel licensing framework, and are not relevant for the present exercise of determining the ARR for FY 2010-11.

### **6.3 RECOVERY OF REGULATORY ASSETS AND PAST REVENUE GAPS**

RInfra-D submitted that large numbers of consumers have migrated to TPC-D in FY 2010-11 itself, and RInfra-D would be left with a smaller consumer base to recover the regulatory assets shown above, which include the un-recovered power purchase cost of the previous years. RInfra-D added that as more and more consumers migrate, the impact of these regulatory assets and past revenue gaps in Rs. per kWh terms would keep on leap-frogging. RInfra-D added that these regulatory assets have been created mainly on account of power purchased to meet the demand of its customers, including all those customers who have migrated and would migrate to TPC-D. Also, due to the stay on tariffs, RInfra-D could not recover the cost, which ought to have been recovered from the consumers. RInfra-D added that unless the Commission appropriately allocates the cost on existing and migrated consumers, migrating consumers will not see the impact of these regulatory assets, even though these costs have been incurred to provide supply to such consumers also. RInfra-D further submitted that recovering these costs from a smaller set of consumers would increase the tariff impact on the remaining consumers. RInfra-D requested the Commission to prescribe a charge leviable on all consumers connected to RInfra-D system - whether own or migrated - so that migrating consumers bear their fair share of past costs of RInfra-D. RInfra-D submitted that it would propose recovery of the above past regulatory assets spread over a period of 3 to 5 years starting FY 2011-12 in, the subsequent MYT Petition.

In this regard, RInfra-D had filed Appeal No. 200 of 2010 before the Hon'ble Appellate Tribunal for Electricity (APTEL), seeking directions upon the Commission to consider the two important issues relating to the cross-subsidy surcharge and regulatory assets from change over consumers in the tariff proceedings. In its Order dated March 1, 2011, the APTEL held as follows:

*"The learned counsel for the Commission would submit that in respect of the regulatory assets, subject to the availability of the material on record, the Commission will decide the same in the tariff proceedings. In respect of cross-subsidy surcharge, it is submitted that there is some proposal to frame Open Access Regulations, 2011 and therefore, this issue may be decided subsequent to framing of the Regulations. Be that as it may, now it is submitted that the petition for ARR 2011 has been admitted and the same is pending before the Commission.*

*In the circumstances of the case, we deem it appropriate to direct the Commission to consider the same in the light of the statement made by the learned counsel for the Commission within 120 days either from the date of admission or from today, whichever is earlier.*

*The Commission may decide the same after hearing all the parties concerned including the other respondents."*

From the above, it is seen that RInfra-D has not actually proposed the detailed rationale and method for recovery of the regulatory assets from consumers who have migrated/would be migrating, and has only sought recovery of the regulatory assets from all the consumers who are connected to RInfra-D system. Also, RInfra-D has not proposed the exact manner in which the regulatory assets will be recovered over a period of 3 to 5 years. All these aspects would become clear only when RInfra-D actually proposes the charges in its MYT Petition. As a result, the consumers have also found it difficult to assess the impact of RInfra-D's request to recover the regulatory assets from consumers who have migrated/would be migrating. However, in response to RInfra-D's proposal, several consumers have put forth their comments and suggestions on the same, as captured in Section 2.18 of this Order, and as summarised below:

- a) Several stakeholders objected to the recovery of past regulatory assets from already migrated consumers, based on the following premise
  - i) There is no provision in the EA 2003, which entitles a distribution license to claim its past revenue gaps from someone who is no longer its consumer for supply of electricity.
  - ii) If a new consumer can be charged towards recovery of past revenue gap by reason of being a consumer of the distribution licensee at the time of recovery, then by the same logic a person who is no longer the consumer of the licensee at the time of recovery, cannot be called upon to pay towards past revenue gaps.
  - iii) The deferred revenue gap is the outcome of inefficient operations of RInfra-D inspite of directives by the Commission to execute long term PPA, and hence, the consumers should not be asked to pay for the distribution licensee's consistent failure.
- b) On the other hand, quite a few consumers submitted that migrating consumers should also bear their share of past costs as proposed by RInfra-D, while other consumers submitted that the Commission may issue a methodology in the interest of the small consumers and not burden them by recovery of the huge regulatory asset of RInfra-D.

Thus, the common opinion on this matter is divided, and appears to be emanating from the respective positions of migrated consumer or consumers who choose to remain with RInfra-D.

Though the actual charges to be levied can be determined only after RInfra-D proposes the same, based on the appropriate formula and timeframe of recovery, the Commission is of the view that it is necessary to give a ruling on the issue of applicability of the charges to be levied for recovery of the regulatory assets of previous years, i.e., it is necessary to identify which set of consumers will be liable to pay the necessary charges for recovery of the regulatory assets over a period of time. Based on the material available to the Commission, submissions of the stakeholders on this issue, and the Commission's analysis of the issues involved, the Commission hereby rules as under in this regard:

- a) Had there been no migration of consumers, and all the consumers had continued to be connected to RInfra-D for receiving supply from RInfra-D, this issue would not have arisen, as the regulatory assets would have been recovered from all the consumers in a manner similar to that done in the past. The issue of recovery of regulatory asset has arisen because of the migration of certain consumers from RInfra-D to TPC-D, which has been facilitated by the Commission's Interim Order dated October 15, 2009 in Case No. 50 of 2009.
- b) The consumers can be classified into the following three groups, viz.,
  - i) Group I: Consumers who continue to be connected to RInfra-D and continue to receive supply from RInfra-D
  - ii) Group II: Consumers who continue to be connected to RInfra-D, but have migrated to TPC-D for receiving supply, i.e., consumers who are receiving supply from TPC-D through RInfra-D's wires
  - iii) Group III: Consumers who are no longer connected to RInfra-D, and have migrated to TPC-D for receiving supply, i.e., consumers who are receiving supply from TPC-D through TPC-D's wires
- c) Electricity, being an ongoing business, consumers are also added regularly to the system, while some consumers would move away from the system, either to another licence area or another State/country. Under 'business-as-usual' circumstances, regulatory assets as well as the impact of truing up and associated carrying costs as well as Fuel Adjustment Cost (FAC) Charges are recovered only from the consumers who are receiving supply at the time of recovery, and are not recovered on a one-to-one basis from the same set of consumers who were receiving supply at the time of incurring the costs. It may be noted that under 'business-as-usual' circumstances, the consumers who are receiving supply

from the licensee are also the same set of consumers who are connected to the distribution network of the licensee.

- d) However, the present situation is not a 'business-as-usual' situation, and is one of the few instances in the country where parallel licensees are operating in the same area of supply and consumers have the right to migrate from one licensee to another. The migration has been facilitated by the above-referred Commission's Interim Order dated October 15, 2009, which was based on the Judgment of the Hon'ble Supreme Court of India dated July 8, 2008 in Civil Appeal No. 2898 of 2006 with Civil Appeal No.s 3466 and 3467 of 2006, wherein the Hon'ble Supreme Court ruled as under:

*"The concept of wheeling has been introduced in the 2003 Act to enable distribution licensees who are yet to instal their distribution line to supply electricity directly to retail consumers, subject to payment of surcharge in addition to the charges for wheeling as the State Commission may determine. ..."*

- e) Thus, even though a sizeable number of consumers have 'migrated' from RInfra-D to TPC-D and are now receiving supply from TPC-D, a majority of these consumers are still connected to RInfra-D and hence, continue to be consumers of RInfra-D, as the definition of 'consumer' as per the EA 2003 [Section 2(15)] includes any person whose premises are for the time being connected for the purpose of receiving electricity with the works of a licensee.
- f) The present status (as of June 30, 2011) of 'migrated' consumers is as under:

Sl.	Period		Cumulative number of Migrated Consumers		
	From	To	Connected to RInfra-D network	Connected to TPC-D network	Total
1	15.10.09	31.03.10	28,272	1,778	30,050
2	01.04.10	31.03.11	98,590	4,093	1,02,683
3	01.04.11	30.06.11	1,54,116	5,031	1,59,147

- g) Thus, out of the total consumer base of 1.59 lakh consumers who have 'migrated' from RInfra-D to TPC-D till June 30, 2011, only 5031 consumers are connected on TPC-D network, while the remaining 1.54 lakh consumers continue to be connected to RInfra-D network.
- h) Given this background, the applicability of the charges to recover the regulatory assets for the above Groups and the rationale for the same are discussed below:
- i) Group I: will have to pay the charges for recovery of regulatory assets, since they continue to be consumers of RInfra-D, both for Wires as well as Supply



- ii) Group II: will have to pay the charges for recovery of regulatory assets, since they continue to be consumers of RInfra-D for Wires
- iii) Group III: will not have to pay the charges for recovery of regulatory assets, since they are no longer consumers of RInfra-D, either for Wires or Supply, and charges can be levied by a licensee only on a 'consumer'.

Accordingly, RInfra-D should propose recovery of the regulatory asset from Group I and Group II consumers, in the subsequent years.

#### **6.4 LOSS OF CROSS-SUBSIDY**

RInfra-D submitted that in FY 2009-10, there has been about 208 MU of reduction in sales due to consumer change-over to TPC-D. This number will increase to 1278 MU in FY 2010-11, which is also an estimate as already approved by the Commission and the actual number is expected to be larger. RInfra-D observed that the majority of this migrated sale comes from subsidising industrial and commercial consumers, with sales to subsidized domestic category forming only about 13% of total change-over sales.

RInfra-D added that the actual migration till date as well as that approved and recognized by the Commission makes it apparent that the consumer base of RInfra-D will constitute increasingly of low-end subsidized consumers. This class of consumers forms the most price-sensitive category with the lowest paying capacity and these consumers will bear the burden of loss of cross-subsidy on account of migration of subsidizing consumers of RInfra-D. RInfra-D submitted that such an eventuality can, however, be averted if the Commission prescribes a Cross-Subsidy Surcharge to recover loss of cross-subsidy from migrating consumers.

RInfra-D added that it had filed a Petition (Case No. 7 of 2010) before the Commission to prescribe a Cross-Subsidy Surcharge to recoup the loss of cross-subsidy from migrating consumers. RInfra-D had requested for an in-principle approval of the Surcharge, with actual numbers being decided after submission of the ARR Petition. The Commission, while disposing off the Petition, stated in its Order that it shall consider the issue of cross-subsidy loss at the time of filing of ARR Petition by RInfra-D, and did not provide in-principle approval to application of Surcharge.

RInfra-D requested the Commission to prescribe a Cross-Subsidy Surcharge (CSS) on migrating consumers, and proposed the methodology for determination of CSS as under:

#### **6.4.1 Option (A): Avoided Cost of Purchase**

RInfra-D submitted that its proposal is based on avoidance of power purchase cost as advocated in the Tariff Policy notified by the Government of India in January 2006. However, RInfra-D differs with the Tariff Policy on how such avoidance should be determined. The Policy advocates considering variable cost of top 5% power from a distribution licensee's portfolio, however, RInfra-D is of the opinion that avoided cost should be as close to actual avoidance as possible as the fundamental principle of surcharge is to compensate the distribution licensees for loss of current level of cross-subsidy. The formula proposed to be adopted by RInfra-D for determination of CSS is as follows:

$$S = T - [C/(1-L)+D]$$

Where S = Cross-Subsidy Surcharge;

C = Avoided Cost of Power, determined as below:

$$C = Q_p * C_p + Q_{op} * C_{op}$$

Where,

$Q_p$  = Quantum of power whose purchase is forecast to be avoided in Peak Hours;

$C_p$  = Cost of Avoided Power in Peak Hours, based on Merit Order determination starting from the most expensive power as approved in the Licensee's portfolio;

$Q_{op}$  = Quantum of power whose purchase is forecast to be avoided in Off-Peak Hours;

$C_{op}$  = Cost of Avoided Power in Off-Peak Hours, based on Merit Order determination starting from the most expensive power as approved in the Licensee's portfolio;

L = System Losses made up of Distribution and InSTS losses; and

D = Wheeling Charges, as approved.

In order to arrive at a representative avoided cost, RInfra-D has segregated the change-over quantum into consumption during peak and off-peak hours of RInfra-D system, based on each consumer category's consumption percentage during RInfra-D system peak hours. The peak hours considered by RInfra-D for this purpose are 10:00 to 20:00 hours and each category's consumption percentage during peak hours is determined using sample load profiles (load curves) of each category.

Using the above, RInfra-D has determined power purchase quantum that will be avoided during peak hours and off-peak hours separately, out of the total estimated change-over sales of 1278

MU. RInfra-D has then applied merit order to determine the cost of power purchase avoided during peak hours and during off-peak hours and weighted the two to determine rate of avoided power purchase, i.e., element 'C' in the Tariff Policy formula.

RInfra-D has projected the CSS using the above explained method as given in the below table. For consumer categories returning a negative value of surcharge, RInfra-D has proposed that in such cases the CSS should be set at zero.

**Table: Cross-subsidy Surcharge using Avoided Cost of Purchase Method for FY 2010-11**

<b>Consumer Category</b>	<b>ABR (T)</b>	<b>Avoided Power Cost (C)</b>	<b>C/(1-L%)</b>	<b>Wheeling Charges (D)</b>	<b>CSS (Rs/unit)</b>
LT I -Below Poverty Line	0.5	4.96	5.73	1.19	-
LT -I Residential (Single Phase)					
0-100	3.12	4.96	5.73	1.19	-
101-300	6.08	4.96	5.73	1.19	-
301-500	9.61	4.96	5.73	1.19	2.68
500and above	11.26	4.96	5.73	1.19	4.34
LT -I Residential (Three phase)					
0-100	3.16	4.96	5.73	1.19	-
101-300	5.84	4.96	5.73	1.19	-
301-500	9.53	4.96	5.73	1.19	2.61
500and above	10.84	4.96	5.73	1.19	3.92
LT II : LT - Non - Residential					
LT II (a) - 0-20 kW	8.58	4.96	5.73	1.19	1.66
LT II (b) - 20-50 kW	10.9	4.96	5.73	1.19	3.97
LT II (c) - above 50 kW	11.47	4.96	5.73	1.19	4.54
LT III - LT Industrial upto 20 kW	8	4.96	5.73	1.19	1.08
LT IV - LT Industrial above 20 kW	7.91	4.96	5.73	1.19	0.99
LT-V : LT- Advertisements and Hoardings	17.96	4.96	5.73	1.19	11.04
LT VI: LT -Street Lights	8.77	4.96	5.73	1.19	1.85
LT-VII (A): LT -Temporary Supply Religious	4.42	4.96	5.73	1.19	-
LT-VII (B): LT -Temporary Supply Others	15.89	4.96	5.73	1.19	8.97
LT VIII: LT - Crematorium & Burial Grounds	3.82	4.96	5.73	1.19	-
LT IX: LT -Agriculture	0.82	4.96	5.73	1.19	-
HT I: HT-Industry	7.99	4.96	5.29	0.62	2.07
HTII : HT- Commercial	9.18	4.96	5.29	0.62	3.26
HT III: HT-Group Housing Society	5.61	4.96	5.29	0.62	-
HTIV : HT - Temporary Supply	11	4.96	5.29	0.62	5.09

#### **6.4.2 Option (B): Embedded cost allocation – Alternate method**

In this method, RInfra-D proposed that CSS could be determined using the traditional method of tariff minus cost of supply. However, the cost of supply adopted would not be simple average cost of supply, but it will be the allocated cost of power purchase plus the cost of distribution wires (as per voltage level - HT and LT), plus the other costs pertaining to retail supply (including InSTS cost, Stand-by charges, SLDC cost and distribution retail costs).

Allocated cost of power purchase will be determined on the basis of the consumer category's hourly contribution to system load and the hourly cost of source-wise power purchase of licensee. Hourly source-wise power purchase will be determined using demand pattern of the licensee and the rate of power purchase from available sources. Hourly contribution of each consumer category to total consumption in such hour will be determined using sample load curves of each category and using representative load factors as determined from sample load curves. The representative load factors will be used to convert hourly demand profile to hourly energy (MU) profile of different consumer categories.

Weighted average per unit power purchase cost will be determined for each consumer category based on allocated cost of power in Rs. crore (using above method) and forecast sales of each category. To this, per unit cost of distribution wires will be added depending upon voltage level – HT or LT (which is same as wheeling charges at these levels). Further, other cost elements of ARR (representing retail cost) will also be added.

Total per unit allocated cost as determined from above is then subtracted from the average tariff (Average Billing Rate) of each consumer category to determine the Cross-Subsidy Surcharge (or per cross-subsidy built in the tariff).

As can be seen from above, the proposed computation is not at all dependent on how much quantum of power will be avoided and consequently it does not require any estimate of volume or mix of migration. However, the method requires the licensee to provide its projected source-wise hourly aggregated power purchase for the ensuing year and the hourly consumption profile of consumers, based on sample load curves for different categories.

RInfra-D has worked out the Cross-Subsidy Surcharge following the above method, which is presented in the tables below:

**Table: Alternative Method for Cross-Subsidy Surcharge computations for FY 2010-11**  
(Rs/kWh)

Consumer Category	Sales (MU)	Allocated PP cost	Stand by and SLDC cost	InSTS cost	Dist. Wires cost	Dist. Retail costs	Total Allocated cost	ABR (T)	CSS
LT I - Below Poverty Line	0.49	4.45	0.27	0.27	1.19	0.61	6.8	0.5	-
LT -I Residential (Single Phase)									
0-100	2,020.68	4.45	0.27	0.27	1.19	0.61	6.8	3.12	-
101-300	1,291.68	4.45	0.27	0.27	1.19	0.61	6.8	6.08	-
301-500	189.6	4.45	0.27	0.27	1.19	0.61	6.8	9.61	2.81
500and above	72.55	4.45	0.27	0.27	1.19	0.61	6.8	11.26	4.46
LT -I Residential (Three phase)									
0-100	237.07	4.45	0.27	0.27	1.19	0.61	6.8	3.16	-
101-300	361.1	4.45	0.27	0.27	1.19	0.61	6.8	5.84	-
301-500	181.83	4.45	0.27	0.27	1.19	0.61	6.8	9.53	2.73
500and above	303.96	4.45	0.27	0.27	1.19	0.61	6.8	10.84	4.04
LT II : LT - Non – Residential									
LT II (a) - 0-20 kW	1,407.20	4.76	0.27	0.27	1.19	0.61	7.11	8.58	1.47
LT II (a) TOD Option	0.03								
LT II (b) - 20-50 kW	207.5	4.76	0.27	0.27	1.19	0.61	7.11	10.9	3.79
LT II (c) - above 50 kW	414.17	4.67	0.27	0.27	1.19	0.61	7.02	11.47	4.45
LT III - LT Industrial upto 20 kW	147.6	4.87	0.27	0.27	1.19	0.61	7.22	8	0.78
LT IV - LT Industrial above 20 kW	357.57	4.87	0.27	0.27	1.19	0.61	7.22	7.91	0.69
LT-V : LT- Advertisements and Hoardings	4.1	4.29	0.27	0.27	1.19	0.61	6.63	17.96	11.33
LT VI: LT –Street Lights	57.08	4.29	0.27	0.27	1.19	0.61	6.63	8.77	2.14
LT-VII (A): LT - Temporary Supply Religious	2.93	4.67	0.27	0.27	1.19	0.61	7.02	4.42	-
LT-VII (B): LT - Temporary Supply Others	102.7	4.67	0.27	0.27	1.19	0.61	7.02	15.89	8.87
LT VIII: LT - Crematorium & Burial	0.9	4.67	0.27	0.27	1.19	0.61	7.02	3.82	-

Consumer Category	Sales (MU)	Allocated PP cost	Stand by and SLDC cost	InSTS cost	Dist. Wires cost	Dist. Retail costs	Total Allocated cost	ABR (T)	CSS
Grounds									
LT IX: LT - Agriculture	0.05	4.45	0.27	0.27	1.19	0.61	6.8	0.82	-
HT I: HT-Industry	219.05	4.66	0.27	0.27	0.62	0.61	6.43	7.99	1.56
HTII : HT-Commercial	252.29	4.69	0.27	0.27	0.62	0.61	6.46	9.18	2.72
HT III: HT-Group Housing Society	34.48	4.48	0.27	0.27	0.62	0.61	6.26	5.61	-
HTIV : HT - Temporary Supply	8.1	4.69	0.27	0.27	0.62	0.61	6.46	11	4.54
<b>Total</b>	<b>7,874.72</b>								

RInfra-D submitted that Option (B) is operationally advantageous to the extent it does not require projections of consumer migration for the ensuing year and how much power may be avoided. The consumers know the CSS upfront at the time of determination of tariff and there is no uncertainty in the magnitude of surcharge. Further, the migrating consumer would simply pay its contribution of cross-subsidy built in the tariff, without worrying about avoidance of power purchase. The avoided cost of power purchase would be consequently spread over as FAC credit over the balance consumers of the licensee as at present and would not be required to be retained.

In this regard, RInfra-D had also filed Appeal No. 200 of 2010 before the Hon'ble Appellate Tribunal for Electricity (ATE), seeking relief in terms of a direction to the Commission to consider the two issues of cross-subsidy surcharge and regulatory assets from change-over consumers, in the tariff proceedings. The Judgment of the ATE in this matter is as under:

*"The learned counsel for the Commission would submit that in respect of the regulatory assets, subject to the availability of the material on record, the Commission will decide the same in the tariff proceedings. In respect of cross-subsidy surcharge, it is submitted that there is some proposal to frame Open Access Regulations, 2011 and therefore, this issue may be decided subsequent to framing of the Regulations. Be that as it may, now it is submitted that the petition for ARR 2011 has been admitted and the same is pending before the Commission.*

*In the circumstances of the case, we deem it appropriate to direct the Commission to consider the same in the light of the statement made by the learned counsel for the Commission within 120 days either from the date of admission or from today, whichever is earlier.*

*The Commission may decide the same after hearing all the parties concerned including the other respondents.*

*With these observations, the Appeal is disposed of." (emphasis added)*

Thus, as regards the issue of Cross-subsidy Surcharge, the Commission had submitted before the ATE and it had been considered by the ATE that “*In respect of cross-subsidy surcharge, it is submitted that there is some proposal to frame Open Access Regulations, 2011 and therefore, this issue may be decided subsequent to framing of the Regulations*”. Further, the Commission is also in the process of framing the Regulations. Hence, the method of computation of cross-subsidy surcharge as applicable would be finalised under such Regulations, and the actual cross-subsidy surcharge to be levied can be determined only after RInfra-D proposes the same, based on the appropriate formula to be determined.

However, the Commission is of the view that it is necessary to give a ruling on the issue of applicability of the cross-subsidy surcharge, i.e., it is necessary to identify which set of consumers will be liable to pay the cross-subsidy surcharge. Based on the material available to the Commission, submissions of the stakeholders on this issue, and the Commission's analysis of the issues involved, the Commission hereby rules as under in this regard:

- a) Had there been no migration of consumers, and all the consumers had continued to be connected to RInfra-D for receiving supply from RInfra-D, this issue would not have arisen, as there would have been no loss of cross-subsidy due to migration. The issue of levy of cross-subsidy surcharge has arisen because of the loss of cross-subsidy on account of migration of consumers from RInfra-D to TPC-D, in terms the Commission's Interim Order dated October 15, 2009 in Case No. 50 of 2009 considering the Judgment of the Hon'ble Supreme Court of India dated July 8, 2008 in Civil Appeal No. 2898 of 2006 with Civil Appeal No.s 3466 and 3467 of 2006, wherein the Hon'ble Supreme Court ruled as under:

*"The concept of wheeling has been introduced in the 2003 Act to enable distribution licensees who are yet to instal their distribution line to supply electricity directly to retail consumers, **subject to payment of surcharge in addition to the charges for wheeling as the State Commission may determine. ...**"(emphasis added)*

- b) The consumers can be classified into three Groups as elaborated in Section 6.3 above.
- c) As elaborated in Section 6.3 above, out of the total consumer base of 1.59 lakh consumers who have 'migrated' from RInfra-D to TPC-D till June 30, 2011, only 5031 consumers are connected on TPC-D network, while the remaining 1.54 lakh consumers continue to be connected to RInfra-D network.
- d) Given this background, the applicability of the cross-subsidy surcharge for the above Groups and the rationale for the same are discussed below:
  - i) Group I: will not have to pay the cross-subsidy surcharge, since they continue to be consumers of RInfra-D, both for Wires as well as Supply, and are paying the extant cross-subsidy through their tariff
  - ii) Group II: will have to pay the cross-subsidy surcharge, since they continue to be consumers of RInfra-D for Wires, and cross-subsidy surcharge has to be levied, to meet the requirements of current level of cross-subsidy.
  - iii) Group III: will not have to pay the cross-subsidy surcharge, since they are no longer consumers of RInfra-D, either for Wires or Supply, and charges can be levied by a licensee only on a 'consumer'.
- e) Since the scheme of migration has been formulated in accordance with the above-referred Hon'ble Supreme Court judgment, the cross-subsidy surcharge will be applicable from the date of migration, till such time the respective consumer disconnects from the distribution network of RInfra.

The applicability of charges for recovery of regulatory assets and the cross-subsidy surcharge is summarised in the following matrix:



Sl.	Particulars	Applicability of Charges to		
		Group I	Group II	Group III
1	Charges for recovery of Regulatory Assets	Yes	Yes	No
2	Cross-subsidy Surcharge	No	Yes	No

**Note:**

Group I: Consumers who are receiving supply from RInfra-D through RInfra-D's wires

Group II: Consumers who are receiving supply from TPC-D through RInfra-D's wires

Group III: Consumers who are receiving supply from TPC-D through TPC-D's wires

Sd/-  
(Vijay L. Sonavane)  
Member

Sd/-  
(V.P. Raja)  
Chairman

## APPENDIX 1

### List of persons who attended the Technical Validation Session held on November 16, 2010

Sr. No.	Name and Organisations
1	Shri Abhishake Vijay, RInfra
2	Shri Ashok Pendse, TBIA
3	Shri Krishna Shenoy, RInfra
4	Shri Sandeep Ohri, Individual, Bijlee Yahoo Groups, CR
5	Shri Vivek Mihsra, RInfra
6	Shri Karn Pallav, RInfra
7	Shri N. Ponrathnam, CR
8	Shri P S Pandya, RInfra
9	Shri Mayant, RInfra
10	Shri Sharad Nath, RInfra
11	Shri K. Shridhar, RInfra
12	Shri R. R. Mehta, RInfra
13	Shri Kapil Sharma, RInfra
14	Shri Anup Mondal, RInfra
15	Shri P.M. Hundiwale, RInfra
16	Shri P.V. Chawande, RInfra
17	Shri S. T. Dharwala, RInfra
18	Shri Anvesh Jain, RInfra
19	Shri Ajit Karpe, RInfra
20	Shri Rakesh Pal Abrol, Bhartiya Udhami ,CR

### List of persons who attended the Technical Validation Session held on January 17, 2011

Sr. No.	Name and Organisation
1	Shri Krishna Shenoy, RInfra
2	Shri Vivek Mishra, RInfra
3	Shri N. Ponrathnam, CR
4	Shri P. P. Vaidya, RInfra
5	Shri Karan Pallav, RInfra

6	Shri R.R. Mehta,RInfra
7	Shri P.S. Pandya,RInfra
8	Shri K. Shridhan, RInfra
9	Shri K. Karkaria,RInfra
10	Shri Kapil Sharma,RInfra
11	Shri Ashok Pendse,TBIA
12	Shri Anvesh Jain,RInfra
13	Shri R. P. Abrol, CR
14	Shri Mayant,,RInfra
15	Shri Abhishek, RInfra
16	Shri P. M. Hundilwale,RInfra
17	Shri Anup Mondal,RInfra

## APPENDIX 2

### List of Objectors

No.	Name & Address of the Objector	Institution
1	Shri P. V. Joshi	Tata Power Company Ltd.
2	General Manager	BES&T Undertaking
3	Shri Sandeep N. Ohri	Individual/ BIJLEE Yahoo Groups/ Consumer Represetative for this case (CR)
4	Shri N. Ponarathanam	Vel Induction Hardening, CR
5	Shri Raksh Pal Abrol	Bharatiya Udhami Avam Upbhokta Sangh,CR
6	Shri Ulhas Chaudhari	Individual
7	Shri Pradeep S Jain	Jankalyan Developers
8	Shri Partha S. Ganguly	Mumbai International Airport P. Ltd.
9	Shri P.N. Sridharan	Individual
10	Shri Deepak N. Israni	Individual
11	Shri K. R. Nevrekar	Nagari Nivara Parishad
12	Shri Vinayak Joshi & Shri Amit Nevrekar	Individual
13	Shri Sukesh Shetty	Indian Hotel & Restaurant Ass.
14	Shri A.R. Bapat	Individual
15	Smt. Jude G. Tandon	Individual
16	Shri Prakash Kothari	Individual
17	Shri Kamal Shah	Individual

### List of Objectors Participated during Public Hearing held on April 02, 2011

S.No	Name of the person and Designation & Organization
1.	Shri Kapil Shrama, Asst. Vice President (Legal), Reliance Infrastructure Ltd.
2.	Shri P V Joshi, Cheif Manager, Tata Power Company Ltd.
3.	Shri Sandeep N. Ohri, CR
4.	Shri N. Ponarathanam,CR
5.	Shri Rakshpal Abrol,CR
6.	Shri Partha Sarthi Ganguly, Mumbai International Airport P. Ltd.

<b>S.No</b>	<b>Name of the person and Designation &amp; Organization</b>
7.	Shri Amit Nevrekar
8	Shri Jude G Tandon
9	Shri Bhupendra Shelar
10	Shri Ravindra Kadam
11	Shri Prabhkar T Sarvankar
12	Shri Jitendra D Pawar
13	Shri S V Pai
14	Shri N Thapar
15	Smt Amruta Pradhan
16	Shri Baba Kulkarni
17	Shri Kailash Varma
18	Shri Mohmed Sikander A Shaikh
19	Shri Anil Upadhyay