Order
on
True up for FY 2010-11,
Aggregate Revenue Requirement
for
FY 2012-13 to FY 2014-15
and
Distribution Tariff (Wheeling & Retail Supply)
for
FY 2012-13
for
TATA Power Delhi Distribution Limited

DELHI ELECTRICITY REGULATORY COMMISSION

JULY, 2012

दि वि वि आ
DERC

DELHI ELECTRICITY REGULATORY COMMISSION

Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi- 110017.

F.11(775)/DERC/2011-12/

Petition No. 05/2012

In the matter of: Petition for approval of True-up for FY 2010-11, Annual Revenue Requirement for MYT period FY 2012-13 to FY 2014-15.

Tata Power Delhi Distribution Limited,
Through its: **Managing Director**
Sub-Station Building, Hudson Lines,
Kingsway Camp ,
Delhi 110 009.

...Petitioner/Licensee

Coram:

Sh. P. D. Sudhakar, Chairman,
Sh. Shyam Wadhera, Member &
Sh. J. P. Singh, Member.

ORDER

(Date of Order: 13.07.2012)

Having deliberated upon the Petition for approval of True-up for FY 2010-11, Annual Revenue Requirement for MYT period FY 2012-13 to FY 2014-15 filed by M/s. Tata Power Delhi Distribution Limited alongwith the Business Plan for the said Control Period; and the subsequent filings by the Petitioner during the course of proceedings; and having considered the responses received from stakeholders, the Commission in exercise of the powers vested under the Electricity Act, 2003 and the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 hereby pass this Order signed, dated and issued on 13.07.2012.

The Tariff Schedule, issued by the Commission on 26.06.2012 vide Order no. F.11(775)/DERC/2011-12/1753 with the revised tariffs made applicable from 01.07.2012, is an integral part of this Order.

This Tariff Order shall remain in force till replaced by a subsequent Tariff Order and/or is amended, reviewed or modified, in accordance with the provisions of the Electricity Act, 2003 and the Regulations made thereunder.

(J. P. Singh)	(Shyam Wadhera)	(P. D. Sudhakar)
MEMBER	MEMBER	CHAIRMAN

LIST OF TABLES

List of Abbreviations

Abbreviation	Explanation
ARR	Aggregate Revenue Requirement
A&G	Administrative and General
AAD	Advance Against Depreciation
ABT	Availability Based Tariff
ACD	Advance Consumption Deposit
AMR	Automated Meter Reading
APDRP	Accelerated Power Development and Reforms Program
AT&C	Aggregate Technical and Commercial
ATE	Appellate Tribunal for Electricity
BEST	Birhanmumbai Electric Supply and Transport
BHEL	Bharat Heavy Electrical Limited
BIS	Bureau of Indian Standards
BPTA	Bulk Power Transmission Agreement
BRPL	BSES Rajdhani Power Limited
BST	Bulk Supply Tariff
BTPS	Badarpur Thermal Power Station
BYPL	BSES Yamuna Power Limited
CAGR	Compounded Annual Growth Rate
CCGT	Combined Cycle Gas Turbine
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CFL	Compact Fluorescent Lamp
CGHS	Cooperative Group Housing Societies
CGS	Central Generating Stations
CIC	Central Information Commission
CISF	Central Industrial Security Force
CoS	Cost of Supply
CPI	Consumer Price Index
CPRI	Central Power Research Institute
CPSUs	Central Power Sector Utilities
CSGS	Central Sector Generating Stations
CWIP	Capital Work in Progress
DA	Dearness Allowance
DDA	Delhi Development Authority
DERA	Delhi Electricity Reform Act
DERC	Delhi Electricity Regulatory Commission
DIAL	Delhi International Airport Limited
DISCOMs	Distribution Companies (BRPL, BYPL, TPDDL & NDMC)
DMRC	Delhi Metro Rail Corporation
DPCL	Delhi Power Company Limited
DTL	Delhi Transco Limited
DVB	Delhi Vidyut Board

Abbreviation	Explanation
DVC	Damodar Valley Corporation
EHV	Extra High Voltage
EPS	Electric Power Survey
FBT	Fringe Benefit Tax
FPA	Fuel Price Adjustment
GFA	Gross Fixed Assets
GIS	Geographical Information System
GoNCTD	Government of National Capital Territory of Delhi
GTPS	Gas Turbine Power Station
HEP	Hydro Electric Power
HPSEB	Himachal Pradesh State Electricity Board
HRA	House Rent Allowance
HT	High Tension
HVDS	High Voltage Distribution System
IDC	Interest During Construction
IGI Airport	Indira Gandhi International Airport
IPGCL	Indraprastha Power Generation Company Limited
JJ Cluster	Jhugghi Jhopadi Cluster
KSEB	Kerala State Electricity Board
LED	Light Emitting Diode
LIP	Large Industrial Power
LT	Low Tension
LVDS	Low Voltage Distribution System
MCD	Municipal Corporation of Delhi
MES	Military Engineering Service
MLHT	Mixed Load High Tension
MMC	Monthly Minimum Charge
MoP	Ministry of Power
MTNL	Mahanagar Telephone Nigam Limited
MU	Million Units
MYT	Multi Year Tariff
NABL	National Accreditation Board for Testing and Calibration of Laboratories
NAPS	Narora Atomic Power Station
NCT	National Capital Territory
NCTPS	National Capital Thermal Power Station
NDLT	Non Domestic Low Tension
NDMC	New Delhi Municipal Corporation
NEP	National Electricity Policy
NGO	Non Government Organisation
NHPC	National Hydroelectric Power Corporation
NPCIL	Nuclear Power Corporation of India Limited
NRPC	Northern Regional Power Committee
NTI	Non Tariff Income

Abbreviation	Explanation
NTP	National Tariff Policy
O&M	Operations and Maintenance
OCFA	Opening Cost of Fixed Assets
PGCIL	Power Grid Corporation of India
PLF	Plant Load Factor
PLR	Prime Lending Rate
PPA	Power Purchase Agreement / Power Purchase Adjustment
PPCL	Pragati Power Corporation Limited
PTC	Power Trading Corporation
PWD	Public Works Department
R&M	Repair and Maintenance
RAPS	Rajasthan Atomic Power Station
REA	Regional Energy Account
RoCE	Return on Capital Employed
ROE	Return on Equity
RRB	Regulated Rate Base
RTI	Right to Information
RWA	Resident Welfare Associations
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SIP	Small Industrial Power
SJVNL	Satluj Jal Vidyut Nigam Limited
SLDC	State Load Despatch Centre
SPD	Single Point Delivery
SPUs	State Power Utilities
SVRS	Special Voluntary Retirement Scheme
THDC	Tehri Hydro Development Corporation
ToD	Time of Day
TPDDL	Tata Power Delhi Distribution Limited
TPS	Thermal Power Station
UI	Unscheduled Interchange
UoM	Units of Measurement
WACC	Weighted Average Cost of Capital
WC	Working Capital
WPI	Wholesale Price Index

A1: INTRODUCTION

1.1 This Order relates to the petition filed by Tata Power Delhi Distribution Limited (hereinafter referred to as 'TPDDL' or the 'Petitioner') for True-up for FY 2010-11, Review & Provisional True-up for FY 2011-12 under the Multi Year Tariff Principles specified in the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2007 (hereinafter referred to as the 'MYT Regulations 2007') and MYT Petition for Distribution (Wheeling & Retail Supply) Business for FY 2012-13 to FY 2014-15 under the Multi Year Tariff Principles specified in the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011 (hereinafter referred to as the 'MYT Regulations').

Tata Power Delhi Distribution Limited

1.2 TPDDL is a company incorporated under the Companies Act, 1956 and is engaged in the business of distribution and retail supply of electricity in the specified area of North and North West of Delhi in the NCT of Delhi (as specified in the Transfer Scheme).

Delhi Electricity Regulatory Commission

1.3 Delhi Electricity Regulatory Commission (hereinafter referred to as 'DERC' or the 'Commission') was constituted by the GoNCTD on March 3, 1999 and it became operational from December 10, 1999.

1.4 The Commission's approach to regulation is driven by the Electricity Act 2003, the National Electricity Plan, the Tariff Policy and the Delhi Electricity Reform Act 2000 (hereinafter referred to as 'DERA'). The Act mandates the Commission to take measures conducive to the development and management of the electricity industry in an efficient, economic and competitive manner which inter alia includes tariff determination.

The Co-ordination Forum

1.5 The Commission has, since the constitution of the Co-ordination Forum on June 16, 2005, held 25 meetings. In the 24th and 25th Co-ordination Forum Meeting held on November 9, 2011 and March 19, 2012 respectively, the Commission discussed the following:

24th Co-ordination Forum Meeting

(a) Repair and utilization of distribution transformers of erstwhile DVB period handed over to DISCOMs.

(b) Replacement of oil filled transformers by dry type transformers inside residential / commercial buildings.

(c) Commissioning of Bawana Power Project by PPCL.

(d) Regulation of power by central PSUs for BRPL and BYPL.

(e) Commission advised the DISCOMs to examine their cash flow on monthly basis and make the payment on account of power purchase and wheeling charges on priority to central/ State Power utilities to avoid regulation of power.

25th Co-ordination Forum Meeting

(a) Various issues such as replacement of oil filled type by dry type transformers, repair of distribution transformers etc. were discussed.

(b) The guidelines of implementation of Intra State Open Access in Delhi were discussed and it was decided that suitable modification may be carried out to the draft guidelines.

(c) Compliance of the directions issued by the Commission regarding Residual Back Flow, Absolute Earth Potential and Separate neutral for each connection were reviewed.

(d) The distribution licensees were advised to carry out energy audit from time to time.

(e) Introduction of Time of Day metering from FY 2012-13 onwards was discussed with the distribution companies.

(f) The time of submission of the Asset Register was discussed with the distribution companies and DTL. They were directed to make the Asset Register available to the Commission within 15 days.

Multi Year Tariff Regulations

1.6 The Commission issued regulations vide Order dated December 02, 2011 specifying Terms and Conditions for Determination of Tariff for Generation, Transmission and Distribution of electricity under the Multi Year Tariff (MYT) framework for the period FY 2012-13 to FY 2014-15 after going through the public hearing process following due process of Law. The Regulations/ Amendment in Regulations were notified in the official Gazette on 19 January, 2012/ 15 March, 2012 respectively.

Filing of Petition for True Up of expenses for FY 2010-11 and approval of ARR for FY 2012-13 to FY 2014-15

Filing & Acceptance of Petition

1.7 TPDDL has filed its petition before the Commission on February 7, 2012 for True-up for FY 2010-11 and Annual Revenue Requirement for MYT period FY 2012-13 to FY 2014-15. The Commission admitted the petition vide its Order dated February 9, 2012 subject to clarifications/additional information, if any, which would be sought from the Petitioner from time to time. A copy of the Admission Order dated February 9, 2012 is enclosed as **Annexure I** to this Order.

1.8 Further, as requested by stakeholders, the Commission directed all the Power Utilities to submit a Hindi version of the Petition filed by them. The Hindi version of the Petition was uploaded on the website of the Commission as well as the website of the Petitioner for the benefit of stakeholders.

Interaction with the Petitioner

1.9 The Order has referred at numerous places to various actions taken by the "Commission". It may be mentioned for the sake of clarity, that the term "Commission" in most of the cases refers to the Staff of the Commission and the Consultants appointed by the Commission for carrying out the due diligence on the petitions filed by the utilities, obtaining and analysing information/clarifications received from the utilities and submitting all issues for consideration by the Commission.

1.10 For this purpose, the Commission Staff and Consultants held discussions with the Petitioners, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided.

1.11 The role of the Commission is to hold public hearings and to take the final view with respect to various issues concerning the principles and guidelines for tariff determination. The use of the term "Commission" may, therefore, be read in the context of the above clarification. The Commission has considered due diligence conducted by the Staff of the Commission and the Consultants in arriving at its final decision.

1.12 A preliminary scrutiny/analysis of the petition submitted by the Petitioner was conducted and certain deficiencies were observed. Accordingly, deficiency notes were issued to the Petitioner. Further, additional information/clarifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed key issues raised in the petition, which included details of capital expenditure and capitalisation plan, allocation of expenses into Wheeling and Retail Supply Business, AT&C loss reduction trajectory, liability towards SVRS expenditure, etc The Petitioner submitted additional information through various letters, as listed in Table 1.

1.13 The Commission also conducted multiple validation sessions with the Petitioner during which discrepancies in the petition and additional information required by the Commission were sought. Subsequently, the Petitioner submitted replies to the issues raised in these sessions and provided documentary evidence to substantiate its claims regarding various submissions.

1.14 The replies of the Petitioner, as mentioned in the table below, have been considered for approval of the ARR of the Petitioner:

Table 1: List of correspondence with TPDDL

Date	Letter No.	Subject
29/02/2012	NDPL/Finance/DERC/1	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
02/03/2012	-	Clarification information in ref. to deficiency memo (ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11)
09/03/2012	NDPL/Finance/DERC/4	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
20/03/2012	NDPL/Finance/DERC/2	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
20/03/2012	NDPL/Finance/DERC/6	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
24/03/2012	ND/OPS/PM&CC/DERC	Reply in the matter of Petition filed by PPCL for determination of generation Tariff for MYT control period FY 2012-13to 2014-15
27/03/2012	ND/OPS/PM&CC/DERC	Reply in the matter of Petition filed by DTL for approval of ARR for FY 2012—13 to 2014-15 for Wheeling Business.
28/03/2012	TPDDL/PMG/28032012	Submission of Additional Information Reg:
29/03/2012	NDPL/Finance/DERC/7	Business Plan for FY 2012-13 to FY 2014-15
29/03/2012	- -	Response/Objection to the request for Public Response against the ARR petition filed by the DISCOMs. For approval of True-Up for the year 2010-11, Review and Provisional True Up for the year 2011-12 and MYT Petition for distribution business for FY 2012-13 to 2013-15 as appeared in the News papers on dated 10th March 2012
30/03/2012	ND/OPS/PM&CC/DERC	Reply in the matter of the Petition filed by the IPGCL for determination of generation Tariff for MYT control period FY 2012-13 to 2014-15.
30/03/2012	-	Business Plan for FY 2012-13 to FY 2014-15
30/03/2012	ND/OPS/PM&CC/DERC	Reply the matter of Petition filed by IPGCL for determination of generation Tariff for MYT control Period FY 2012-13 to 2014-15
30/03/2012	NDPL/Finance/DEF/8	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
02.04.2012	-------	Information pursuant to technical session held on dated 20.03.2012 & 22.03.2012.
02.04.2012	NDPL/Finance/DERC/9	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11.
02/04/2012	NDPL/OPS/PM&CC/DERC	---
04/04/2012	NDPL/Finance /DERC/10	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
18/04/2012	TPDDL/DERC/2012-13	Information regarding AT&C Losses

Date	Letter No.	Subject
23/04/2012	TPDDL/Finance/DERC/	Carrying Cost on Truing Up of Expenses up to FY 2006-07
07.05.2012	NDPL/Finance/DERC/	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11.
07.05.2012	-------	FW: Knocking off power purchase provision of FY 10-11
09.05.2012	TPDDL/CCM/DERC/3	Details regarding own/self consumption of electricity of Distribution Licensees.
09/05/2012	TPDDL/CCM/DERC/3	Submission of requisite information pursuant to Hon'ble Commission's meetings on prudence check of Form 2.1a
16.05.2012	No.163/AEE(P)/12	Details regarding own/self consumption of electricity of NDMC
16/05/2012	TPDDL/DERC/2012-13	Redemption of Investment made in GOI- Securities against contingency Reserve.
17.05.2012	NDPL/CCM/3	Prudence check 2010-11.
18.05.2012	TPDDL/CCM/3	Estimated Energy and Demand requirement of power for succeeding five years
18.05.2012	TPDDL/PMG/2012-13/DERC	Submission of information regarding prudence check for FY 10-11.
21/05/2012	TPDDL/DERC/2012-13	Technical validation session for O&M Expenses, Income and Loan details.
22/05/2012	TPDDL/DERC/2012-13	Technical validation session for O&M Expenses, Income and Loan details.
23.05.2012	NDPL/CCM/3	Submission of Form 2.1 a for the month of March-12.
24.05.2012	TPDDL/DERC/2012-13	Technical validation session for FY 10-11.
25.05.2012	NDPL/CCM/3	Details Regarding Energy Consumption under the category " Public Lighting"
28/05/2012	TPDDL/DERC/2012-13	Technical validation session for O&M Expenses, Income and Loan details.
29/05/2012	TPDDL/DERC/2012-13	Technical validation session for O&M Expenses, Income and Loan details.
01/06/2012	TPDDL/PM & CC/1062012	Tariff petition for True-Up of 2010-11.
03/06/2012	TPDDL/DERC/2012-13	Interest on Consumer Security Deposit
03/06/2012	TPDDL/DERC/2012-13	Registration Fees levied under Registration laws in Delhi
06/06/2012	TPDDL/Regulatory/3	Compliance to the directives # 7.14(b) in the Tariff Order for FY 2011-12
08/06/2012	NDPL/ Finance/DERC/	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
11/06/2012	TPDDL/DERC/2012-13	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
11/06/2012	TPDDL/Regulatory/3	Consumers other than purely domestic being billed under domestic category
12.06.2012	TPDDL/DERC/2012-13	Misuse Data
12/06/2012	TPDDL/DERC/2012-13	ARR petition for FY 2012-13 to FY 2014-15 & True Up Petition for FY 2010-11
13.06.2012	TPDDL/DERC/2012-13	Prudence check
14/06/2012	TPDDL/DERC/2012-13	Truing Up of FY 2010-11
20/06/2012	TPDDL/DERC/2012-13	Street light billing
20.06.2012	TPDDL/PMG/20062012	Details of the PGCIL Transmission Charges without arrears for FY (11-12)

Public Hearing

1.15 The Petitioner published a Public Notice indicating the salient features of its petition for inviting comments from the stakeholders, in the following newspapers on the respective dates mentioned alongside:

(a) Hindustan Times (English) – March 10, 2012

(b) Time of India (English) – March 10, 2012

(c) Mint (English)– March 10, 2012

(d) Hindustan (Hindi) – March 13, 2012

(e) Milap (Urdu) – March 13, 2012

1.16 Copies of the Public Notice in English, Hindi and Urdu are enclosed as **Annexure II** to this Order. A copy of the petition was also made available for purchase from the head-office of the Petitioner on any working day from March 10, 2012 to March 29, 2012 between 11 A.M. and 4 P.M. on payment of Rs 100/-. A copy of the complete petition was also uploaded on the website of the Commission, as well as that of the Petitioner, requesting for comments of the stakeholders thereon.

1.17 The Commission also published a Public Notice in the following newspapers on March 15, 2012 inviting comments from stakeholders on the MYT petitions filed by the Petitioners latest by March 30, 2012:

(a) Hindustan Times (English)

(b) Times of India (English)

(c) The Pioneer (English)

(d) Dainik Jagran (Hindi)

(e) Dainik Bhaskar (Hindi)

(f) The Educator (Punjabi)

(g) Milap (Urdu)

1.18 Copies of the Public Notice in English, Hindi, Punjabi and Urdu are attached as Annexure III to this Order.

1.19 At the request of the stakeholders, the Commission extended the last date for filing objections and suggestions to April 10, 2012 for which the Public Notice was issued on March 31, 2012/April 1, 2012 in the following newspapers:

(a) Hindustan Times (English)

(b) Times of India (English)

(c) The Pioneer (English)

(d) Dainik Jagran (Hindi)

(e) Dainik Bhaskar (Hindi)

(f) The Educator (Punjabi)

(g) Milap (Urdu)

1.20 Copies of the above Public Notice in English, Hindi, Punjabi and Urdu are attached as **Annexure IV** to this Order.

1.21 At the request of the stakeholders, to extend help to the consumers in understanding the ARR Petition and filing their comments, the Commission prepared a Staff Paper highlighting salient features of the MYT Petition filed by the Petitioner, which was uploaded on the Commissions' website. In this regard, two officers of the Commission viz. Joint Director (Tariff-Finance) and Joint Director (Tariff-Engineering) were made available to all the interested stakeholders for discussion on the ARR Petitions. This was duly highlighted in the Public Notices brought out by the Commission. In order to increase participation of the stakeholders, the Commission also prepared and uploaded the Hindi version of the Staff Paper on its website.

1.22 The Commission received comments from 136 stakeholders. The comments of the stakeholders were forwarded to the petitioner. The Petitioner responded to the comments of the stakeholders with a copy of its replies to the Commission. The Commission invited all stakeholders who had filed their objections and suggestions to attend the Public Hearing. A list of the stakeholders who responded to the Public Notice on ARR and tariff petitions and/or who attended the public hearing is enclosed as **Annexure V** to this Order.

1.23 The public hearing was held at the Commission's Court Room from April 26, 2012 to April 28, 2012 from 10.30 a.m. onwards to discuss the issues related to the petition filed by the Petitioner. The issues and concerns voiced by various stakeholders have been examined by the Commission. The major issues discussed during the public hearing and/or written comment made by the stakeholders, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter A2.

Layout of the Order

1.24 This Order is organised into six Chapters:

(a) Chapter A1 provides details of the tariff setting process and the approach of the Order;

(b) Chapter A2 provides a brief of the Public Hearing process, including the details of comments of various stakeholders, the Petitioner's response and views of the Commission thereon;

(c) Chapter A3 provide details/ analysis of the true up for FY 2010-11;

(d) Chapter A4 provides analysis of the petition for determination of the Aggregate Revenue Requirement for FY 2012-13 to FY 2014-15 and Wheeling and Retail Supply Tariff for FY 2012-13;

(e) Chapter A5 details of the possible options for determination of Wheeling and Retail Supply Tariff for all consumer categories, and the approach adopted by the Commission in determining the tariff; and

(f) Chapter A6 provides details of the Directives of the Commission for compliance of the Petitioner.

1.25 The Order contains the following Annexure, which are an integral part of the Tariff Order.

(a) Annexure I – Admission Order;

(b) Annexure II – Copies of Public Notices published by the Petitioner;

(c) Annexure III – Copies of the Public Notice published by the Commission inviting comments from the stakeholders;

(d) Annexure IV – Copies of the Public Notice published by the Commission regarding extension of last date of submission of comments.

(e) Annexure V – List of the respondent Stakeholders.

Performance Review

1.26 Regulation 11.2 of the DERC (Terms & Conditions for determination of Wheeling and Retail Supply Tariff) Regulation, 2007 stipulates as under:

"The Distribution Licensee shall submit information as part of annual review on actual performance to assess the performance vis-à-vis the targets approved by the Commission at the beginning of the Control Period. This shall include annual statements of its performance and accounts including latest available audited/actual accounts and tariff worked out in accordance with these Regulations."

1.27 The Commission sought inputs on overall Standards of Performance prescribed in Schedule-II of the Delhi Electricity Supply Code and Performance Standards Regulations, 2007. The details submitted by TPDDL are given in the following table:

Table 2: Overall Standards of Performance for April 2010 – March 2011

Service area	Overall Standard of Performance	Standard of performance achieved
Normal fuse-off calls	At least 99% calls received should be rectified within prescribed time limits in both cities and Towns and in Rural areas	100%
Line Breakdowns	At least 95% of cases resolved within time limit in both Cities and Towns and in Rural area	99.67%
Distribution Transformer failure	At least 95% of DTRs to be replaced within prescribed time limits in both Cities and Towns and in Rural areas	75.46%
Period of scheduled outage		
Maximum duration in a single stretch	At least 90% of cases resolved within time limit	99.55%
Restoration of supply by 6:00 PM		99.55%
Street Light Faults		
Rectification of line faults	At least 90% cases should be complied within prescribed time limits	99.14%
Replacement of fused / defective unit		
Continuity Indices *		
SAIFI	To be laid down by the Commission based on the targets proposed by the Licensees.	4.488
SAIDI		6.317
MAIFI		0.066
Frequency variations	To maintain supply frequency within range as per IEGC.	100%
Voltage Unbalance	Maximum of 3% at point of commencement of supply	100%
Percentage billing mistakes	Not exceeding 0.2%	0.03%
Percentage faulty meters	Not exceeding 3%	0.34%

** Since the DISCOMs inter-se have been following different formula for working out indices, the Commission, has not been able to decide the indices.*

Approach of the Order

Approach for FY 2010-11

1.28 Under the MYT Framework, the Commission has projected the ARR for the Petitioner for each year of the Control Period in the MYT Order 2008-11 issued on February 23, 2008 (hereinafter referred to as the 'MYT Order'). The MYT Regulations, 2007 provides that actual expenses incurred by the Petitioner in respect of the uncontrollable parameters shall be trued up at the end of the respective Financial Year based on the audited accounts and Prudence check.

1.29 Under the MYT Regulations 2007, the components of ARR have been segregated into Controllable and Uncontrollable Parameters. As per Regulation 5.41 & 5.42 of the MYT Regulations, 2007 the Uncontrollable Parameters shall be trued up each year based on the audited accounts and prudence check by the Commission; and, the Controllable Parameters shall not be trued up. As per clause 4.16 of the MYT Regulations, 2007:

"The true up across various controllable and uncontrollable parameters shall be conducted as per principle stated below:

(a) *Variation in revenue / expenditure on account of uncontrollable sales and power purchase shall be trued up every year;*

(b) *For controllable parameters,*

(i) Any surplus or deficit on account of O&M expenses shall be to the account of the Licensee and shall not be trued up in ARR; and

(ii) Depreciation and RoCE shall be trued up at the end of Control Period."

1.30 The Commission has accordingly, trued up the uncontrollable parameters viz. power purchase cost, energy sales and revenue based on the audited accounts and other information submitted by the Petitioner for FY 2010-11 after exercising prudence check. The true up of controllable parameters is governed by Regulation 4.16(b) of the MYT Regulations, 2007 as mentioned above. The detailed treatment of each component of uncontrollable and controllable parameters is provided in Chapter A4 of this Order.

1.31 The Petitioner has raised certain issues that are presently under appeal before the Hon'ble Supreme Court, Hon'ble High Court and Hon'ble Appellate Tribunal of Electricity. Pending the decision of the Court/Tribunal on such issues, the Commission has decided to follow the stand it has already taken in this regard.

Approach for FY 2011-12

1.32 The Petitioner has requested for a review and provisional true up of ARR for FY 2011-12 which had been determined earlier by the Commission in its Order dated August 26, 2011. The mechanism for True up as specified in the MYT Regulations envisages that variations on account of uncontrollable items like energy sales and power purchase cost shall be trued up. Truing up shall be carried out for each year based on actual / audited accounts and prudence checks undertaken by the Commission. Accordingly, the Commission is of the opinion that in accordance with the Regulations, the True up of FY 2011-12 can only be considered based on the audited financial statement once the Petitioner makes a regular tariff Petition for True up of FY 2011-12.

Approach for FY 2012-13 to FY 2014-15

1.33 The ARR for the FY 2012-13 to FY 2014-15 shall be determined inter alia based on the following provision of the MYT Regulations, etc. pertaining to Distribution business:

(a) Regulation 3.2 – ARR and Tariff for Wheeling Business and Retail Supply business separately.

(b) Regulations 4.5 and 4.6 – Base line values (operating and cost parameters) and performance targets.

(c) Regulations 4.7 and 4.8 – Targets for controllable Parameters including AT&C loss, O&M expenditure, Return on capital employed, Depreciation and quality of supply.

(d) Regulations 4.10, 4.11 and 4.12 – Sales forecast

(e) Regulations 5.28 and 5.29 – AT&C loss reduction trajectory for each year of the Control Period.

(f) Regulation 5.30 – Transmission and Load Dispatch Charges and Wheeling charges

(g) The allocation from the unallocated quota of Power at the disposal of GoNCTD may change from time to time and needs to be considered based on the latest available data or the Commission may have to make reasonable assumptions with respect to allocation of Power from the unallocated quota.

(h) Availability of power from the new sources of generation, based on their actual / revised Commissioning schedule.

A2: RESPONSES FROM STAKEHOLDERS

Introduction

2.1 The public hearing was held at the Commission's Court Room from April 26, 2012 to April 28, 2012 from 10.30 a.m. onwards to discuss the issues related to the petition filed by the Petitioner. In the public hearing, the stakeholders put forth their comments/suggestions before the Commission in the presence of the Petitioner. The Petitioner was also given an opportunity to respond to the comments put forth by the stakeholders.

2.2 The issues and concerns voiced by various stakeholders in their written comments as well as in the Public hearing along with the response of the Petitioner there on, have been examined by the Commission. The comments/suggestions of various stakeholders, the replies given by the Petitioner and the views of the Commission have been summarized under various sub-heads below:

Payment to Pension Trust Fund

Stakeholders' View

2.3 Stakeholders have claimed that the successor entities of the erstwhile DVB are liable to make payment to the Pension Fund on account of 1) Actuarial Revaluation of the requirement of the Fund. 2) Reimbursement of actual payment to the retirees by the fund on account of medical reimbursement, LTC from 2002-11 and Pension Arrears paid on account of Sixth Pay Commission recommendations. (Total demand raised by the Fund up to Feb 2012 – Rs 285 Cr).

2.4 The Pension Trust Fund has claimed that the Commission had allowed, on provisional basis, a sum of Rs 150 Cr in the transmission tariff order of DTL for FY 2011-12 to be recovered from distribution utilities. The stakeholders have claimed that the Commission did not deliberate on the amount of liabilities accounted by DTL and IPGCL towards Pension Trust against the proportionate amount of actual payments disbursed by Pension Trust against medical, LTC and arrears of revised pension. As a result DTL and IPGCL, after having paid a sum of Rs 9 Cr and Rs 10 Cr in FY 2010-11 did not pay to Pension Trust the balance amount of the liabilities even though it is accounted for in their accounts.

2.5 The Delhi State Electricity Workers Union has submitted that an amount of Rs 150 Cr should be allowed in each financial year with an escalation of 15% per annum during FY 2012-13 to FY 2014-15 for all successor entities in ARR of DTL towards payment to Pension Trust. The Union has further requested that a carrying cost of 12% on the amount payable by the Petitioners to the Pension Trust from the date it had become due should be allowed.

2.6 The Union has also requested that the Commission may recommend to Govt. of NCT of Delhi to issue appropriate orders to the Petitioners for early payment of all outstanding dues.

Petitioner's Submission

2.7 The Petitioner has submitted that the DISCOMs are not liable for payments of all outstanding dues of pension, family pension. However, the contribution to pension trust for employees transferred to DISCOMs is being made to the trust. Further, they have submitted that they have abided by the dispensation for payment to pension trust directed by Hon'ble Commission in Tariff Order FY 2011-12 and has clarified that the claim with respect to the payments sought towards heads of LTC, medical and pension arrears has been in dispute with the Pension Trust and hence, are not payable by successor entities till the judgment on the same is through. Further, the Petitioner has submitted that they are already granting electricity concession to its FRSR governed employees, retirees.

2.8 Regarding the dispensation of the amount of Rs 150 Cr, the petitioner has submitted that no such component has been specified therein to form part of Petitioner's ARR. The issue of underfunding of Pension Trust is also sub judice in Hon'ble Delhi High Court which has been acknowledged by the Hon'ble Commission. Further, they have submitted that a one-time ad-hoc allowance by the Hon'ble Commission, taking into account various factors, cannot be a justification to allow this claim for the new control period.

2.9 Also, with regard to the claim of allowing carrying cots @12% on the outstanding dues, the Petitioner has submitted that such a claim is unjustified since carrying cost is allowed on a different concept where owing to deferment of legitimate and rightful entitlement to any sums of money the utility is compensated by interest costs.

2.10 TPDDL has, however, has not submitted any reply to the issues raised by the Stakeholders.

Commission's View

2.11 During the public hearing, the distribution licensees submitted that the accounts of the Pension Trust have not been audited. Also in their view the funding of the Trust by GoNCTD is not based on an actuarial valuation. As a result of the under-funding, the Trust is able to meet its liability towards pension and other payments to retired employees. The matter is also before the Hon'ble High Court of Delhi.

2.12 The Commission intends to advise the Govt. of NCT of Delhi u/s 86(2) of the EA, 2003 to have the accounts audited immediately and also consider restructuring the Board of Trustees so that Government nominees are inducted on the Board . This is necessary for ensuring proper management of the Trust and servicing of the liabilities towards the retired employees, for which necessary provisions should be made by the respective employing entities in their accounts.

2.13 In order to avoid undue hardship to the retired employees (Pensioners) the Commission is making an ad-hoc one time provision of Rs. 160 crore in the DTL Tariff Order of FY 2012-13 for passing on to the Pension Trust. The Commission is of the view that ad-hoc provisions of this nature cannot continue in future and the parties to the dispute before the Hon'ble High Court of Delhi should expedite the proceedings before the Court and explore other avenues for settlement of the dispute.

Tariff for DMRC

Stakeholders' View

2.14 DMRC has submitted that it may be continued to be treated as a separate category of consumer whose tariff would be based on the actual cost to serve (at 220 kV or 66 kV) excluding both the subsidy and cross subsidy elements. DMRC tariff has been fixed in the past years based on the principles deliberated and settled after discussions between DMRC, Distribution licensees and the GoNCTD. Also from technical considerations, DMRC needs supply at 66 kV/ 220kV and presently DMRC is taking electricity directly at the inter-connection points of Delhi Transco Limited. The entire distribution network and system beyond the inter-connection points is owned, operated, maintained, serviced, upgraded and utilized exclusively by DMRC, without any intervention to the services rendered by Distribution licensees. The only costs applicable to the Distribution licensees are that of metering and cost of input purchase.

2.15 DMRC requested for continuation of the principles adopted in earlier Tariff Orders of the Commission namely that the DMRC's tariff should be based on the cost at which electricity is available to the licensee at the inter-connection points of TRANSCO and it certainly should not include other expenses of Distribution licensees other than the said input cost.

2.16 It has been highlighted that DMRC has already been paying the Distribution licensees a tariff which is higher than the 'cost to serve' rates. Also the 'cost to serve' rates indicated by the Distribution licensees already include all charges inclusive of profit overheads etc. Any further hike in tariff will only contribute to increasing the difference between the cost to serve and the tariff charged to DMRC and hence will mean cross subsidizing other consumers.

2.17 BRPL and BYPL should be required to increase their collection efficiency like NDPL.

2.18 With regards to the power supply to commercial establishments in DMRC premises the Commission has issued an Order on February 29, 2012. DMRC has requested that the same be included in the tariff order.

2.19 DMRC has submitted that at present the security deposit for each connection is being paid by DMRC in the form of bank draft/cheque as the note of Rs 1500/kW or Rs 1275/kVA. On this security deposit, Discoms are crediting interest @ 6% through energy bill at the end of the year. Since now the fixed deposit interest rates are 10%, DMRC may be given an option of the security deposit in form of a bank guarantee.

Petitioner's Submission

2.20 The Petitioner has submitted that they have provided cost-to-service model for FY 2010-11 in its petition. Further, the Petitioner shall be shortly submitting the cost-to-service data for FY 2011-12 to FY 2014-15 to the Hon'ble Commission. BRPL has submitted that the cost allocation for various voltage levels is done by an independent cost auditor. The MYT petitions are filed on the basis of cost audit report which has been submitted with the ARR petition

2.21 BRPL has submitted that it has an exemplary collection efficiency track record with collection efficiency of more than 100% in past few years. Collection efficiency figures of more than 100% reflect the collection of past arrears and the petitioner's efficiency in recovering past losses. It has further submitted that that one of the main reasons it was able to achieve a high collection efficiency in the previous years was on account of the fact that the company was able to recover the arrears of past period including the arrears on account of DVB, which now have been either collected or written off. Further, as per the earlier MYT Regulations, 2007 the Collection Efficiency included portion of revenue realization from electricity duty and late payment surcharge collected during the financial year. For example in FY 2010-11, while distribution losses were in the range of 18.02%, the AT&C loss of 16.85% could be achieved through higher collection efficiency of 101.4%. If the Petitioner was required to exclude the same, the Collection Efficiency would be substantially lower. In view of the above, the Petitioner anticipates that the collection efficiency as per the revised definition would not be more than 98.5% as per the industry standards.

2.22 The Petitioner has proposed various alternative proposals for the consideration of the Hon'ble Commission including implementation of Power Purchase Price adjustment (PPPA). PPPA has been proposed to address the fluctuations in the power purchase cost that will happen after the tariff order issued.

2.23 Further, it is pertinent to mention that Banks do not issue the Bank Guarantee with lifetime validity. Further, it may also be appreciated that on the security deposit paid by the consumers, Discoms are also paying interest on the same.

2.24 The Petitioner has submitted that tariff fixation is the sole prerogative of the Commission.

Commission's View

2.25 The Commission reiterates its views acknowledging DMRC to be an essential service serviced by different distribution licensees in the NCT of Delhi. The Distribution licensees should ensure that DMRC receives uninterrupted power supply. The Commission is of the view that the electricity tariff to be charged from DMRC has to be fixed keeping in view the special nature of the supply to DMRC.

2.26 The Commission will examine the issue of interest rate on Security Deposit and, providing security deposit in form of Bank Guarantee, while finalizing the Draft Delhi Electricity Supply Code and Performance Standards Regulations, 2007.

2.27 The Order issued by the Commission dated 29 February 2012 regarding the Power supply to commercial establishments in DMRC premises has been made a part of this Tariff Order.

2.28 The respective tariff category is dealt with in the Tariff Design Chapter.

Railways Traction Tariff

Stakeholders' View

2.29 Representative of Indian Railway submitted that there should be no increase in Railway Traction Tariff and should be kept at a reasonable rate, as per the recommendations of MoP and Public Accounts Committee of Lok Sabha. It was submitted that average electricity cost of realization for Railway traction should be brought down to reasonable level by cutting down energy charges and demand charges at par with NTPC/NHPC i.e. central generating units rate of supply.

2.30 The stakeholders stated that as per the National Tariff Policy notified by Ministry of Power, Government of India (GoI), the electricity tariff should progressively reflect the cost of supply. It was also submitted that the tariff for Railways should be linked to cost of supply, while taking into account the fact that it draws power at 66kV where losses are minimal.

2.31 It was submitted that there should be no discrimination in tariff between Railway and DMRC. Railways should be charged a tariff lower, if not equal to that applicable to DMRC.

2.32 It was further stated that the fixed charges being levied for Railways are very high (@Rs 150/kVA) compared to other neighbouring states like Haryana (@Rs 125/kVA). The billing demand should be 65% of the contract demand or recorded demand whichever is higher during the month.

2.33 Northern Railways should be exempted from payment of penalty charges on over drawl of power which becomes unavoidable in many situations arising on account of failure of supply from supplying authorities, accidents, and agitations etc which are beyond the control of the Railways. The stakeholder also stated that additional charges for MDI in excess of contract demand are very high. Given that Railways is unable to control its load at all times, it has been suggested that excess load of up to 10% of Contract Demand be allowed for short durations before application of load violation charges.

2.34 It has been submitted that the load of traction substation being fairly constant throughout the day and forms the base load of the system, Time Differential Tariffs should not be applied to Railways.

2.35 It has been submitted that UPERC has agreed for payment of ACD/security deposit in the shape of a bank guarantee instead of cash. On the similar lines, DERC may consider payment of ACD/security deposit, if any, in the shape of bank guarantee instead of cash for railway traction in Delhi.

Petitioner's Submission

2.36 The Petitioner has submitted that tariff fixation is the sole prerogative of the Commission.

2.37 The Petitioner has submitted that the Billing Demand concept followed is in line with Delhi Electricity Supply Code and Performance Standards Regulations 2007. The Penalty charged on over-drawal has to be in line with that of other categories of Consumers as per DERC directives. Exemption from the same to one category of Consumer may result into creating discrimination amongst consumers, which is against the basic tenets of the Electricity Act 2003. Also, it may be noted that the amount recovered from fixed charges is also included in the gross income and is considered towards revenue available for tariff determination.

2.38 The Petitioner has submitted that there are no 3 shift industries in Delhi; therefore, benefit of ToD may be limited as it's mainly the 3 shift industries, which can shift their loads. However, as per National Electricity Policy, it is recommended to go for ToD for reducing the peak demand. In line with the same, it is advisable to at least try & implement the ToD tariff for high end Consumers, based on experience of which, it can be implemented for lower end Consumers also. BRPL has submitted that the concept of time-differentiated tariff aims at shifting time of peak demand, thereby flattening the load curve for which the utility provides incentives to shift consumption to off-peak hours and offers dis-incentives for consumption during peak hours. The concern is as to how to encourage shifting of energy consumption from peak hour to non-peak hours to reduce the marginal cost of power required for meeting the peak demand. ToD Tariff as a concept is quite beneficial for the stakeholders.

2.39 Further, they have mentioned that Banks do not issue the Bank Guarantee with lifetime validity. Further, it may also be appreciated that on the security deposit paid by the consumers, Discoms are also paying interest on the same. Further, the Petitioner has submitted that it trusts that the request shall be considered appropriately by the Hon'ble Commission.

Commission's View

2.40 The Commission acknowledges the critical role played by the Railways in the economic development of the nation.

2.41 The Commission has examined the request of the Railways to exempt them from the payment of penalty charges on over drawl considering the unique nature of traction load. In the Tariff Order dated 9 June, 2004, the Commission has specified that whenever the MDI reading exceeds contract demand, a surcharge of 30% shall be levied on the fixed charges corresponding to excess demand for such billing cycle. The Commission would like to point out that such a surcharge is levied on all consumers as the Utilities have to plan in advance to cater to the load of the consumers including the Railways. In case of over drawl of electricity by any consumer, the Utility has to arrange for additional power from costlier sources to meet the demand of the consumer.

2.42 The Appellate Tribunal for Electricity in the matter of Northern Railway versus Delhi Electricity Regulatory Commission and others upheld the impugned Order of the Commission, whereby, the Commission treated the DMRC as a distinct special class for the purpose of the tariff. The Appellate Tribunal for Electricity further observed that the establishment of DMRC for providing the Mass Rapid Transit System is itself an important ground for treating the DMRC as a separate distinct class of consumers.

2.43 The Commission will examine the issue of interest rate on Security Deposit and, providing security deposit in form of Bank Guarantee, while finalizing the Draft Delhi Electricity Supply Code and Performance Standards Regulations, 2007.

2.44 The respective tariff category is dealt with in the Tariff Design Chapter

Tariff for DJB

Stakeholders' View

2.45 DJB has submitted that the tariff for DJB should be based cost to serve basis without any cross subsidy, at par with the tariff for DMRC.

2.46 It has also submitted that the Commission has not considered all the connections of DJB in the special category. Only 11 kV connections (130) were considered. The other connections (4366) are still in the commercial category. They have requested for inclusion of the other connections (mainly pump sets) also in the special category.

2.47 DJB has applied for open access system to DERC, the reply of which is still awaited. The decision of the Commission in the matter should be expedited.

Petitioner's Submission

2.48 *{No replies have been received from the licensee}*

Commission's View

2.49 The Commission recognises the pact that DJB is providing an essential service to the citizen of Delhi. As advised by APTEL in its judgement dated 10.04.2012, the commission has re-considered the tariff category for DJB and decided to bring it on par with Industrial establishments. Details are given in the Tariff Design Chapter.

Tariff for Telecom Tower Operators

Stakeholders' View

2.50 The stakeholder has submitted that the commercial tariff in the state is already amongst the highest in the country and should not be increased further.

2.51 It has further requested that a separate sub-category may be introduced for telecom towers in the NDLT category. The consumers have submitted that it should be treated as separate category as it is an infrastructure service provider for essential services to be catered to 24*7. Further the type of load catered by it is mixed load of radio frequency communication instrument as well as air-conditioning. Due to the nature of the services offered, the consumers are proposing a lower tariff than commercial and industrial consumers.

2.52 The stakeholder has requested compulsory installation of AMR meters and roll out of consolidated bills for large consumers with multiple connections. Consumers such as large telecom operators operate various telecom towers in Delhi, each of which is billed separately. Consolidated billing would increase efficiency by reducing the billing cost and improved collection efficiency. It would also help the consumers who would not have to pay individual bills.

Petitioner's Submission

2.53 The Petitioner has submitted that deciding the Consumer Category and fixation of tariff for any Consumer category is the sole prerogative of the Commission.

2.54 BRPL has submitted that it welcomes the suggestions of the respondent regarding consolidated billing and AMRs. BRPL has already installed AMRs for all consumers above 45kW load and efforts are on to maximize their usage. AMRs would be installed for 10kW above consumers based on techno-economic feasibility. Moreover, BRPL has implemented the SAP for consolidated billing purpose which is already in use.

Commission's View

2.55 The Commission is of the view that the tariff being charged from commercial category, which includes Telecom Tower Operators, has to be seen in totality with respect to the quality as well as reliability of supply. As such creation of a separate tariff category for Telecom Tower Operator is not considered necessary.

2.56 The Commission is of the view that installation of AMR meters and consolidated billing for Telecom tower connections may be considered by the Discoms based on the number of consumers being benefited and, the techno-commercial feasibility.

2.57 The respective tariff category is dealt with in the Tariff Design Chapter.

Maintenance Cost

Stakeholders' View

2.58 Stakeholders have submitted that if any fault arises at the consumer end the Distribution licensees levy charges on the consumers without any fault of the consumer i.e. during the course of any fault if it has been found that the cable is required to be replaced from feeder pillar to the consumer point, invariably the Discoms load the entire cost on consumers. The Stakeholders have requested the

Commission to clarify which kind of cost of maintenance is to be borne by the consumer and which type is to be borne by the Discom.

2.59 Also, stakeholders have requested that all connections must be provided with tamper proof electronic meters. Further, the Discoms are not undertaking adequate O&M. Due to poor O&M, the Discoms are not even following regulatory guidelines like minimum clearance, providing of cradle guards, suitable earthing of electrical equipment and standard maintenance guidelines of safety of shipment.

Petitioner's Submission

2.60 The Petitioner has submitted that all electro-mechanical meters have already been replaced with static meters in line with CEA Central Electricity Authority (CEA) Regulations on Installation and Operation of Meters. However, some unscrupulous consumers keep on devising newer techniques to tamper these meters and as soon as we get to know the same, we address those issues by further adding tamper proof features, which is an ongoing process.

Commission's View

2.61 The Commission also directs the Distribution licensees to carry out the annual and preventive maintenance as per the Maintenance Schedule. The Distribution licensees are directed to submit information on the maintenance undertaken as per the Maintenance Schedule and the amount spent on the same on a quarterly basis.

2.62 The Commission intends to appoint consultants to assist in monitoring proper maintenance of infrastructure and compliance with the provision of Delhi Electricity Supply Code and Performance Standards Regulations for reliable supply and meeting safety requirements as per Measures for Safety Regulation stipulated by CEA.

Power Purchase Cost Adjustment

Stakeholders' View

2.63 Some of the stake holders were opposed to the idea of introducing PPA while others Stakeholders have submitted that there should be no automatic adjustment of power purchase cost. The Commission should scrutinize and allow the increase in Power Purchase Cost.

Petitioner's Submission

2.64 The Petitioner has submitted that for the uncontrollable power purchase costs, it is proposed that the Hon'ble Commission should consider implementation of quarterly/periodic Automatic Power Purchase Price Adjustment formula (PPPA). Implementation of PPPA would be beneficial for consumers as on yearly true up of power purchase costs, carrying cost is imposed while on recovery of quarterly/periodic differential power purchase cost there is no provision for carrying costs and therefore it results in a saving for consumers. Even Appellate Tribunal for

Electricity in its Order dated 11th Nov., 2011, in OP No. 1 of 2011 "Tariff Revision (Suo-Moto action on the letter received from Ministry of Power)" has directed that a mechanism for Power Purchase Cost Adjustment should be put in place.

Commission's View

2.65 The power purchase cost accounts for about 80-90% of Annual Revenue Requirement of the distribution licensees and includes the cost paid for procurement of power, transmission charges, UI charges, SLDC/ RLDC charges.

2.66 The cost of long term power is being fixed by the Central Electricity Regulatory Commission (CERC) for plants supplying power to more than one State and by the Delhi Electricity Regulatory Commission (DERC) for plants located within the NCT of Delhi and supplying only to distribution utilities in Delhi. The charges for unscheduled interchanges and Inter State transmission charges including RLDC charges are being fixed by the CERC. The purchase/ sale of intra state power and intra state transmission charges are fixed by the DERC. The short term purchases/ sale are through traders, bilateral contracts, banking, and power exchanges at market determined prices.

2.67 The power purchase costs vary based upon price and calorific value of fuel (coal /gas) which is reflected in the bills submitted by the generators every month. Also, the level of generation from these stations each month determines the per unit impact of fixed charges. The above make the entire power purchase cost process unpredictable for the distribution utilities, and hence, uncontrollable in nature.

2.68 The Distribution Licensees pay for the power purchase each month with variations as above. Distribution Licensees have to arrange short term financing for making such additional payment which ultimately burdens the consumers in form of carrying cost. Timely recovery of such incremental amount through power purchase adjustment / fuel surcharge adjustment reduces the burden of carrying cost on consumers.

2.69 In order to offset the change in variable cost levied by the Generating Companies in the Power Purchase Bills of the Distribution Companies, Commission had implemented Fuel Price Adjustment (FPA) charges on quarterly basis vide Commission order dated August 26, 2011.

2.70 Hon'ble ATE vide in its judgment dated 11.11.2011 in the matter of Suo-Motu action on the letter received from Ministry of Power (O.P. 1 of 2011) has observed that the Power Purchase Cost is a major expenditure in the ARR of the Distribution Licensee. Both the Fuel and Power Purchase Cost are uncontrollable and both have to be allowed to be recovered as quickly as possible.

2.71 In view of the above, Commission has decided to implement a Power Purchase Cost Adjustment for generating stations having long term PPA's with DISCOMs on quarterly basis in order to adjust the changes in the Power Purchase Cost levied by these Generating Companies on the Distribution Companies.

O&M Expenses

Stakeholders' View

2.72 All litigation expenses of the Distribution licensees, included in the O&M expenses should be borne by the Distribution licensees themselves.

Petitioner's Submission

2.73 The Petitioner has submitted that the larger benefits from the legal expenses incurred by them flow back to the consumers only. They are a professionally managed organization and legal expenses incurred are owing to various reasons such as litigation commenced by actions of third parties which have to be suitably defended by them. Legal expenses are also incurred by the Petitioner to enforce recovery of loss occasioned due to theft/misuse of electricity/accumulation of unpaid dues on premises which, if recovered, increase the collection of the petitioner and their ARR requirement gets reduced to that extent. Apart from this, there are other legitimate claims, disputes arising from time to time of a distribution licensee which may be pursued with generators, transmission companies, traders etc. which are organizations well supported by strong legal backup.

2.74 Further, they have submitted that decisions on all such expenses are taken prudently, taking into consideration the overall interest of the Company and Power Sector in General as prevalent in Delhi.

Commission's View

2.75 Legal expenses form a part of the normative O&M expenses allowed by the Commission. The actual O&M expenses for the past 5 years have been analysed and only reasonable provisions have been allowed as part of the ARR approved by the Commission.

Own Consumption

Stakeholders' View

2.76 The own consumption of energy should not increase exponentially as it has been in case of BYPL. The own consumption of Distribution licensees should be metered.

2.77 Some of the stakeholders also suggested that sales to "own consumption" should be a part of the AT&C loss.

Petitioner's Submission

2.78 The Petitioner has submitted that in audited accounts of TPDDL own consumption is not shown as sales. BRPL has submitted that Own consumption includes the energy consumed at various offices, buildings and sub-stations of the Petitioner. As regards the billing of such energy, it is submitted that the Petitioner's consumption of electricity is billed at zero rate as has been the practice accepted and followed by the Hon'ble Commission in the previous years. This issue has been deliberated by the Hon'ble Commission in previous Tariff Orders.

Commission's View

2.79 The distribution utilities have been showing "self consumption" at their offices/installations at zero cost, in their respective ARRs. While analysing the quantum of such "self consumption" charged by the distribution utilities, the Commission was unable to find a uniform basis or justification for the same. The Commission has considered the matter related to "Self Consumption" by DISCOMs and decided that 0.25% of total units sold during FY 2010-11 may be taken as bench mark on normative basis for determining "Self Consumption" for FY 2010-11. An increment at the rate of 2% (of the previous year's "Self Consumption") may be added each year till FY 2014 -15. The above norms will be reviewed after the end of the current MYT period.

Sale of Power and Power Purchase Cost

Stakeholders' View

2.80 BYPL has sold 1905 MU through UI and bilateral sales at an average rate of Rs 3.54/unit which is Rs 3.00/unit below the procurement cost but purchased power through UI exchange, 1389 MU at average price of Rs 5.18/unit. BYPL purchased 1022 MU from BRPL at Rs 5.51/unit but sold 1604 MU at Rs 3.36 /unit to RETL. The petitioner should be barred from transacting with RETL or RIL. (pertains to only BYPL)

2.81 Stakeholders have submitted that NTPC has increased the rate of electricity, due to which the Hon'ble Commission is bound to increase electricity tariff. Companies need to make such plans and policies so that they purchase electricity at low cost so that the consumers will also get electricity at cheaper rate. Further, Ul sales & surplus power sale could be given to exchange with better prices as Rs.5.00, 6.00, 7.00/Unit for the Second Control Period to realize full cost of power, transmission loss, transmission charges, power theft.

2.82 Generation cost of NTPC should be scrutinized. The tariff for NTPC should be set by DERC and the public hearing for determination of tariff for CERC stations should be open to all consumers.

2.83 Some stakeholders submitted that since no Power Plant is being set up in Delhi the state ends up purchasing power from other states, which is costly. Also, solar power should not be procured as it is very costly, unless available at Thermal Power Rate/Hydro Power rate.

Petitioner's Submission

2.84 The Petitioner has submitted that all the transactions with sister/group companies are undertaken through open and competitive bidding process (vendors like ABB, Alstom, L&T etc. participated) on commercial terms on arms – length basis and duly enclosed in the Annual Reports of the Company under "Related Party Transactions" in accordance with the provision of Companies Act, 1956 and accounting policies and principles governing such disclosures. Such transactions are also advised to the Commission as per the directions issued by it from time to time. The subject matter regarding purchase by Discoms at inflated rates from sister/associate concerns is part of the Appeal filed by the Petitioner before the Hon'ble ATE and the matter is therefore sub-judice. (BYPL)

2.85 The subject matter regarding purchase by Discoms at inflated rates from sister/associate concerns is part of the Appeal filed by the Petitioner before the Hon'ble ATE and the matter is therefore sub-judice.

2.86 The Petitioner has submitted that the tariff increase required is due to increase in power purchase costs from companies like NTPC, NHPC etc. The power purchase cost has gone up by more than 80% in last 4 years from Rs. 2.86/- per unit in 2007-08 to Rs. 5.16/- per unit in 2011-12. It may be noted that bulk of the power is purchased under long term contracts from PSUs like NTPC, NHPC, SVJNL, THDC and State Govt. It may further be noted that TPDDL has made adequate arrangement from long term sources so that Consumers can be provided continuous supply at reasonable cost.

2.87 Further, the Petitioner submitted that Delhi has taken lot of steps towards setting up of new power plants within the state and tying up capacities from new projects in neighboring states. Details of the projects are as follows:

(a) Rithala CCGT- Rithala, Delhi – 94.8 MW

(b) Pragati III (Bawana CCGT), Bawana, Delhi – 1370 MW

(c) Aravali (Jhajjar)- Jhajjar, Haryana – 1500 MW (Dedicated transmission line to Delhi)

(d) NTPC Dadri Stage II- Dadri, U.P. – 980 MW

(e) CLP (Jhajjar)- Jhajjar, Haryana – 1320 MW (132 MW for Delhi)

2.88 With regard to purchase of solar power, the petitioner ahs submitted that it is the Hon'ble Commission's prerogative to decide on the same.

2.89 The Petitioner has submitted that after implementation of CERC new UI regulations w.e.f. 3rd May, 2010, there has been a remarkable improvement in system frequency and hence substantial reduction in UI rates. Last couple of years, it has been observed that rate of bilateral power is being guided by UI rate. As a result, the rate of bilateral power has gone down substantially and there is no way, that utilities can sell the surplus power at rates higher than the prevailing market rates.

Commission's View

2.90 The Commission has already approved various PPAs entered into by the utilities for procurement of power from long term sources. The Commission has also directed the DISCOMs vide its letter dated 21.10.2009 that they should endeavour to provide uninterrupted power supply to the consumers in their respective areas. The licensees shall ensure that electricity which could not be served due to any reason what-so-ever (including maintenance schedule, break-downs, load shedding etc.) shall not exceed 1% of the total energy supplied by them in any particular month, except in cases of force-majeure events which are beyond the control of the Licensee.

2.91 The Commission has also noted that the load curve in Delhi is peculiar in nature with high morning and evening peaks and very low load demand during night hours. It is due to the fact that a majority of the load in Delhi is of commercial establishments, office buildings, which have requirement primarily during day time. The round-the-clock industries, which are a common feature in most of the States and which contribute towards flattening of the load curve are very little in Delhi.

2.92 The Central Electricity Regulatory Commission has issued amendments to UI Regulations vide Order dated 28.04.2010, effective from 03.05.2010, whereby the overdrawl of power by the beneficiaries in excess of their schedule is liable to a 40% additional UI for overdrawls below frequency of 49.5 Hz., which translates to Rs.12.22/kWh. Further, as an exemplary deterrent on overdrawls, the additional UI rate is 100% on overdrawls below grid frequency 49.2 Hz., which translates to Rs.17.46 /kWh. The effect of this quantum increase in penal UI Rates has been that other State Utilities are generally refraining from overdrawing beyond their schedule. This has resulted in optimum grid frequency and thereby very low UI Rates.

2.93 To cater to the peak demand during day time, DISCOMs have been buying Round-the-Clock (RTC) Power. The surplus power during night hours/off peak hours gets sold at the prevailing short-term market rate/Power Exchange Rate/UI Rates which are much lower. In order to optimise the cost of power purchase, the Commission has advised the distribution utilities to explore the possibility of higher purchase of peaking power, so as not to burden the consumers with avoidable purchases of RTC power which entail the sale of off-peak surplus at very low rates under the mechanism of Unscheduled Interchange (UI). The Commission has also urged the distribution utilities to explore possibility of selling surplus power to bulk consumers in adjoining areas in neighbouring states who are deprived of grid power and are resorting to generation of expensive power from captive units. This will result in a win–win situation for all concerned. In this regard, the Commission has also issued statutory advice to the Govt. of NCT of Delhi to facilitate this process.

2.94 The Commission has put in place a mechanism whereby all the power procurements are approved by Delhi Power Procurement Group, comprising of SLDC, DTL, NDPL, BRPL, BYPL. The Commission would like to inform that Bawana Power Plant of 1370 MW capacity has been set up in the NCT of Delhi and is nearing completion. One of its units has also started generation.

2.95 In order to even out the load curve, the Commission has approved a system of Time of Day(ToD) tariff whereby peak hour consumption is charged at higher rates and a rebate given on consumption during off-peak hours. This is expected to induce consumers to reduce load during peak hours and thus control rise in power purchase costs.

2.96 As regards the generation cost of central generating stations, the Commission intends to take up with the CERC regarding periodic scrutiny of such costs in order to maintain effective control and enhance consumer confidence. The Commission is also requesting CERC to conduct regular technical/ cost audits of the cost incurred by the central stations.

2.97 The Commission is issuing statutory advice to Government of NCT of Delhi for approaching the Government of India for higher allocations from the unallocated power from the central generating stations; and also for facilitating the reallocation of power from high cost sources till such time that the same is required for meeting the demand of power in the NCT of Delhi.

Asset Register of Discoms

Stakeholders' View

2.98 The verification of assets by Administrative Staff College of India and Asset Register duly filled in both asset wise and cost wise should be made available in the ARR showing annual addition/deletion of assets.

Petitioner's Submission

2.99 The Petitioner has submitted that the Commission has already appointed a third party for review of Capex and Capitalisation. As regards the asset register, the same has already been submitted to the Hon'ble Commission during the ongoing prudence check.

Commission's View

2.100 The Commission has appointed M/s Feed-back Infra for Capex review and capitalisation of assets through the process of open bidding; and the work is in progress.

Time of Day Tariff

Stakeholders' View

2.101 Some of the stakeholders submitted that the Time of Day (ToD) tariff should be introduced for large commercial and industrial consumers with connected load above 300 kVA and for those consumers who will find it easier to shift their consumption to off-peak hours.

Petitioner's Submission

2.102 The Petitioner has submitted that there are no 3 shift industries in Delhi, therefore, benefit of ToD may be limited as it's mainly the 3 shift industries, which can shift their loads. However, as per National Electricity Policy, it is recommended to go for ToD for reducing the peak demand. In line with the same, it is advisable to at least try & implement the ToD tariff for high end Consumers, based on experience of which, it can be implemented for lower end Consumers also.

Commission's View

2.103 The Commission believes that Time of Day (ToD) tariff is an important Demand Side Management (DSM) measure to give a tariff signal so that peak hour consumption is charged at higher rates which reflect the higher cost of power purchase during peak hours. At the same time, a rebate is being offered on consumption during off-peak hours. This is also meant to incentivize consumers to shift to the extent possible a portion of their loads from peak time to off-peak time, thereby improving the system load factor and even out the load curve. The ToD tariff is aimed at optimizing the cost of power purchase, which constitutes over 80% of the tariff charged from the consumers. It also assumes importance in the context of propagating and implementing DSM and achieving energy efficiency. This is important in Delhi situation as daily load varies from 3000 MW to 5000 MW in summer causing problem of surplus during off peak hours.

2.104 Introduction of higher peak hour tariff would initially generate additional revenue which would compensate for the reduction in revenue on account of lower tariff during off- peak hours

2.105 In the long run, this would provide signal to the consumers to reduce the load during the peak hours and, where possible, shift this consumption to off-peak hours. Any loss of revenue to the utility on account of shifting of load from peak to off-peak hours in the long run would be compensated by way of reduction of off-peak surplus to the extent of increase in off-peak demand.

2.106 The ToD Tariff would thus have immediate as well as long term benefits for both, consumers as well as the utility and contribute toward controlling the rise in power purchase costs.

2.107 The Commission has decided to introduce ToD Tariff on a pilot basis for large industrial and commercial consumers (300 kW and above). This pilot is targeted to the consumers segment which has the capacity to bear a higher tariff burden for peak hour consumption and also at least partly (if not fully) offset the impact of this increase through higher off-peak consumption at lower rates.

2.108 ToD tariff shall be applicable on all consumers (other than domestic) whose sanctioned load/MDI (whichever is higher) is 300kVA or more.

2.109 The Commission has decided to implement the TOD tariff for Industrial and Commercial consumers having a load of 300 kVA and more, in this Tariff Order.

2.110 The ToD tariff Schedule has been made part of this Tariff Order in Chapter 5.

Billing based on MDI Recording

Stakeholders' View

2.111 Most of the stakeholders submitted that MDI billing should not be adopted for non domestic customers, while a few feel it is a good step in encouraging people to declare their actual load, especially for consumers with Sanctioned load between 10-100 kW and MDI greater than 100 kW.

Petitioner's Submission

2.112 The Petitioner has submitted that honest consumers having sanctioned load more than 100 kW and MDI being less than equal to sanctioned load are getting unnecessarily burdened with higher tariff whereas unscrupulous Consumers who are having sanctioned load less than 100 kW and MDI being more than 100 kW, who end up paying lesser tariff, even after 30% surcharge for load violation, which is not fair for such honest consumers.

Commission's View

2.113 The enhancement of sanctioned load of the consumers who are using load in excess of their sanctioned load has been allowed by the Commission on the directions of Hon'ble ATE in appeal no. 139 of 2010 and in compliance of Section 47 of the Electricity Act, 2003.

2.114 It is clarified that MDI based billing for non-domestic consumers has been in vogue since DVB times. In cases of load violation, the charges of relevant category based on MDI along with penalty for load violation are applicable.

Uniform fixed charges till the sanctioned load of 5 kW

Stakeholders' View

2.115 Most of the stakeholders have opposed the distribution licensees proposal of rationalizing the slab based fixed charges for the domestic category for the sanctioned load up to 5 kW to reduce the cross-subsidy burden. The stakeholders are of the opinion that such a structure might only result in the penalization of the low load consumers who will be forced to pay higher fixed charges if a uniform fixed charge is levied up to 5 kW of load.

Petitioner's Submission

2.116 The Petitioner has submitted that the fixed charges incurred per consumer per month by the Discoms are much more than the present charges, causing other domestic consumers of sanctioned load above 5 kW and Consumers of other categories to cross-subsidize the consumers of sanctioned load lower than 5 kW. This gives undue advantage to consumers, who have not increased their sanctioned load to the actual requirement. To avoid this, it has been proposed to restructure the fixed charges for the Domestic category so that a uniform fixed rate is applied to all consumers with sanctioned load up to 5 kW.

Commission's View

2.117 The Commission fixes the tariff keeping in view the provision of the Tariff Policy regarding gradual reduction in the cross subsidies. The Commission feels that the proposal to levy uniform charges up to sanctioned load of 5 kW will burden the low end consumers falling within the tariff category of up to 2 kW.

2.118 In view of the above, the Commission decides to continue with the existing system of levying fixed charges.

Merger of NDHT & NDLT (Non Domestic) and LIP & SIP (Industrial) Consumer Categories

Stakeholders' View

2.119 The stakeholders have objected to this proposal as they feel that the rationale behind maintaining separate categories for each is justified and clubbing them into one category might only result in forcing one class of consumer to pay a higher tariff.

Petitioner's Submission

2.120 The Petitioner has submitted that there is no rationale for charging differential tariff to the Non-Domestic (NDHT, NDLT Consumer categories) as these Consumers use electricity for the same "commercial activity" purpose and similarly, there should be one tariff for Industrial Consumers (SIP, LIP Consumer categories), as they use electricity for "industrial activity" purpose only. This shall help in reducing the number of categories and simplifying the tariff structure and to further curb the malpractices.

Commission's View

2.121 The Commission has in its last Tariff order already rationalised tariff categories based on voltage of supply. Accordingly, Non-Domestic consumers are now charged either at NDLT or NDHT Tariff. Similarly, industrial consumers are charged on SIP(LT) of LIP(HT) tariff.

2.122 The Commission agrees with the view of the stakeholders that merger of Small Industrial Power (SIP) and Large Industrial Power (LIP) will impact the low end consumers (SIP) the most. Therefore, the merger is not being done.

Reliability Charge to be levied on High End consumers

Stakeholders' View

2.123 Some Stakeholders have agreed to the introduction of reliability charge on high consumption consumers, and a new slab of consumers with consumption above 600 units.

Petitioner's Submission

2.124 The Petitioner has submitted that Discoms have now managed to enhance the reliability of power supply to such an extent that even the requirement of managing alternate power supply arrangements (e.g. through Diesel Gensets etc.) by the consumers have gone down considerably. The intent of levying these Reliability charges is in lieu of the amount which the high end consumer category has been saving by not having to maintain and operate alternative arrangement of power sources and further to safeguard the low end consumers so that they are not subjected to burden in form of higher tariff rates, who in any case were not spending such high amounts for ensuring reliable supply.

2.125 "Reliability charges" as a separate component of tariff, are proposed to be levied on high end consumers having high consumption of electricity. These high end consumers in any case were spending Rs. 10-12/- per unit for ensuring continuous supply by operating and maintaining personal DG sets etc. and Discoms by ensuring reliability of supply have facilitated such consumers who are now no longer using DG sets, thus, their expenses for managing the same has gone down considerably.

Commission's View

2.126 The Commission is of the view that it is the duty/universal obligation of the Distribution Licensee to provide un-interrupted power supply to their regular consumers. The Commission has already directed the distribution licensees to strive for uninterrupted power supply and minimum load shedding. The Commission has also directed the Distribution licensees that power which could not be supplied, due to any reason whatsoever, should not exceed 1% in a month. Therefore, levy of an additional reliability charge on any set of consumers has no merit.

Transmission Charges (pertaining to TPDDL)

Stakeholders' View

2.127 It has been pointed out that TPDDL has claimed Intra State Transmission Charges for FY 2010-11 as Rs. 110.54 crore against the bill raised by DTL amounting to Rs. 105.96 crore.

2.128 Similarly, for FY 2011-12, TPDDL has projected an amount of Rs. 298.25 crore against the bill raised by DTL amounting to Rs. 324.82 crore (provisional for March, 2012).

2.129 Further Intra State Transmission losses claimed by TPDDL for FY 2010-11 and 2011-12 are 116.04 MU and 116.07 MU respectively. However, as per State Energy Account, the actual Intra State Transmission Losses for TPDDL are 93.40 MU and 78.41 MU (up to Jan 2012) respectively. The Hon'ble Commission is required to consider the same while passing orders on petition of TPDDL.

Petitioner's Submission

2.130 The Petitioner has submitted the details of the claimed amount as intrastate transmission charges as follows:

	Rs Cr
DTL wheeling charges	105.97
Credits on account of disbursement of STOA charges	-3.18
Tax bill pertaining to FY 09-10 raised in FY 10-11	4.57
SLDC Charges	2.31
BBMB Charges	0.43
Reactive Energy Charges paid to DTL	0.44
Total	**110.54**

2.131 TPDDL has submitted the details of the said amount are as follows:

	Rs Cr	
NRLDC SO Charges	0.71	Actual paid till Oct'11
SLDC charges	1.43	
Reactive Energy Charges	0.43	
Jhajjar Transmission Charges	1.93	
BBMB Charges	0.45	Actual till Oct'11 + estimated for Nov'11 to Mar'12
DTL Wheeling Charges	293.3	
Total	**298.25**	

2.132 The Petitioner has submitted that the intrastate transmission losses are calculated by applying 1.5% losses (DTL wheeling losses) on total power purchased by them at DTL periphery. Hence the figure of 116.04 MU and 116.07 MU for FY 2010-11 and FY 2011-12 are arrived.

2.133 The figures provided by DTL are actual losses calculated for the respective years which are considered for estimating the losses for next year as per the prevailing practice and decisions taken in the commercial committee meeting. For e.g., in the year FY 2010-11, losses of FY 2009-10 were applicable and similarly in the year FY 2011-12, losses of FY 2010-11 were applicable. So, actual losses are not considered for true up or for claiming ARR for any year.

Commission's View

2.134 The Commission conducts the prudence check of Power purchase cost amongst other uncontrollable parameters; and, the Transmission charges are also verified as a part of this Prudence check. The prudence check has been carried out for FY 10-11 and is given in Chapter – 3 of this Tariff Order.

General Comments

Stakeholders' View

2.135 Tariff process should be kept in abeyance till the audit of the Distribution licensees is carried out by the CAG.

Petitioner's Submission

2.136 The Petitioner has submitted that no occasion arises for the process of tariff determination to be kept in abeyance, owing to the audit report being sought of Discoms by CAG. The CAG audit being sought is for particular years in the past only. Further, they have submitted that they have furnished their comments on the issue of audit of Discoms by CAG in the matter before the Hon'ble Delhi High Court and would refrain from commenting further, since the matter is sub-judice.

2.137 BRPL has further submitted that that CAG being a creature of statute, both constitutionally as well as statutorily, its powers do not extend to private companies, like BRPL. Moreover, DERC itself, in its tariff order of 28.05.2009, had observed that the Discom being a company incorporated under the Companies Act 1956, presently there is no such provision on CAG audit in respect of private companies. The fact remains that the Petitioner Company's accounts are audited both internally and externally by statutory auditors as per the requirements of the Companies Act, 1956 and the Hon'ble Commission also undertakes detailed scrutiny of the accounting statements before admitting the expenses in the ARR proceedings. Further, it is also pertinent to note that the Hon'ble Commission determines the tariff only after considering the operational and capital expenditure required by the licensee for supplying power and maintaining its distribution network / infrastructure to meet the load requirements of the consumer. The Hon'ble Commission takes into account all relevant facts and figures for approving the expenses while determining the ARR of the licensees. The Hon'ble Commission determines the tariff to be charged from a category of consumers based on the approved ARR of the licensee.

Commission's View

2.138 The Commission, in view of the overwhelming public sentiment in favour of CAG audit of account of DISCOMs and with a view to bringing transparency in the functioning of the DISCOMs, has reiterated its recommendation to the Delhi Government to have the accounts of DISCOMs audited for MYT period starting from 2007-08.

Stakeholders' View

2.139 The carrying cost on the approved revenue gaps have added additional burden on consumers. This should have been avoided by giving them justified tariff hikes. In the case of allowing further carrying costs, the consumers should be informed of the quantum of the carrying cost and the incidence of it , namely the per unit rate and the period for which this will be recovered. Some mechanism should be created such that the consumer does not have to bear the burden of carrying costs.

Petitioner's Submission

2.140 The Petitioner has submitted that the Hon'ble Commission has implemented the fuel price adjustment mechanism to pass on the cost on timely basis. Further, the Petitioner has proposed to pass on the difference on account of total power purchase cost instead of fuel price only so as to pass on the cost on timely basis as well to avoid burden of carrying cost on the consumers. Regarding the period for recovery, the Petitioner has submitted that the Hon'ble Commission may like to decide, keeping in mind the fact, that any further deferral in allowing these legitimate costs will result into further allowance of interest cost (carrying cost), as the same is required to be funded through loans, resulting into additional burden and ultimately higher tariff for the consumers.

Commission's View

2.141 Power purchase cost constitutes about 80-90% of the ARR. In order to minimize the impact of carrying cost on the power purchase cost from GENCOs, the Commission has, in the previous Tariff Order for FY 2011-12, already implemented the fuel price adjustment mechanism to pass on the cost on timely basis, in order to avoid carrying cost. The Commission is now instituting a mechanism by which increase in cost of power from all plants where DISCOMs have a long term PPA with the generating companies is passed on timely basis.

2.142 Effective from 1.7.2012, the existing surcharge on account of FPA is being absorbed in the revised tariff and fresh Power Purchase Adjustment (PPA) shall be charged so that variation with respect to revised power purchase cost in a quarter are adjusted in the tariff in the succeeding quarter. This will further avoid carrying cost and is in line with APTEL order.

Stakeholders' View

2.143 Technology such as smart grid and AMI metering should be employed to decrease the AT&C losses of the Distribution licensees.

Petitioner's Submission

2.144 The Petitioner has submitted that they are already taking steps towards smart-grid and AMI. As a first step, 2 feeders shall be made smart to gauge the benefits arising out of the same and based on the experience; then it may be replicated for the entire network.

2.145 Automatic Meter Reading (AMR) is already in place for consumers of 45 kW and above. The Commission has already approved demand response scheme of TPDDL, which is a part of smart grid initiative in Delhi. Based on the responses of the pilot project in TPDDL areas, similar schemes will be taken up in other areas, as well.

Commission's View

2.146 AMR metering is already in place for HT consumers. Further Commission has approved a pilot project for smart grid for commercial and industrial consumers in TPDDL. Commission has also directed the Distribution licensees to provide AMRs to all consumers above 300kW.

Stakeholders' View

2.147 The consumers should be provided a copy of the petition free of cost.

Petitioner's Submission

2.148 With regards to the free copy of the Petition, the Petitioner has submitted that it is the prerogative of the Hon'ble Commission to decide the same.

Commission's View

2.149 The Commission feels that DISCOMs are charging a nominal amount from the consumers for a copy of the petition. In case, it is provided free of cost then DISCOMs will charge the cost to the ARR and this will also be to the account of consumers only. The Stakeholders can also download a copy of the Petition from the website of the Commission/Petitioners.

Stakeholders' View

2.150 The income from fixed charges is not being shown in its gross income by BRPL.

Petitioner's Submission

2.151 BRPL has submitted that all revenues earned by the licensee from Fixed Charges are considered as income in the ARR Petition submitted by the licensee. When a consumer is connected to the distribution system, the distribution utility has to provide/allocate certain capacity of the distribution system to serve the consumer. In addition to this, some expenses such as meter reading, billing, bill delivery, maintenance etc are fixed in nature and independent of the energy consumption. The petitioner also pays fixed charges in addition to the variable charges to the generating companies for sourcing power. The licensee also pays fixed charges to the Transmission Company for transmitting power. The rationale for levying fixed charges is to recover a part of the fixed cost of the utility so that at least a part of the fixed cost is recovered even if there is no consumption by the consumer. The fixed charges component in a two part tariff is aimed at defraying the capital related and other fixed costs. Section 45 (3) of Electricity Act, 2003 also provides for the levy of fixed charges.

Commission's View

2.152 While considering the collection of revenue by the Distribution licensees, the Commission considers revenue collection on account of fixed charges as well as energy charges.

Stakeholders' View

2.153 Distribution licensees should be advised to generate higher NTI from other sources like advertising etc. to reduce the revenue gap.

Petitioner's Submission

2.154 The Petitioner has submitted that the said directive has already been issued by the Hon'ble Commission vide their Tariff order dated 26.08.2011 for FY 2011-12 and different avenues are currently being explored for implementation thereof.

Commission's View

2.155 The Commission has already directed the DISCOM to explore all possible measures for raising revenue. This is necessary to reduce the impact of rising cost on retail tariff.

Stakeholders' View

2.156 The petitioner has not submitted the true up petition for controllable expenses during 2007-12. The tariff petition is thus incomplete. (BYPL)

Petitioner's Submission

2.157 Pertains to BYPL (No reply).

Commission's View

2.158 As per the MYT Regulations, the controllable expenses are not subject to true-up except the Depreciation and RoCE, which shall be trued-up at the end of the Control period based on the capitalisation approved by the Commission. In this regard, the Commission has extended the MYT Control period for one more year up to FY 2011-12. Hence the Petitions in this respect shall be received at the end of the control period, i.e. FY 2011-12.

Stakeholders' View

2.159 The stakeholder has claimed that BYPL has failed to achieve the AT&C loss reduction to 18% as fixed by the Commission in the MYT Regulation 2007-12 and attained a loss reduction of 21.67%. Additionally, stakeholders have requested for consideration of collection efficiency at 100% for the purpose of tariff determination. (BYPL). Also, the Hon'ble Commission has not indicated the loss reduction trajectory in the MYT Regulation FY 2012-13 to FY 2014-15. Further, it is felt the loss reduction must be brought below 15% by 2012.

Petitioner's Submission

2.160 Pertains to BYPL (No reply).

Commission's View

2.161 The Commission has fixed the target AT&C loss reduction trajectory for the MYT period in this Order. The collection efficiency for fixing targets has been kept as 99.5%. The AT&C loss figures during 1st MYT period FY 2007-12 are being verified at the time of true up of expenses of a particular year and appropriate order passed in the True-up petitions.

Stakeholders' View

2.162 Govt Run Hospital, College and School should not be charged at domestic tariff. The Govt. should provide direct subsidy to these consumers if it wishes to. However, there were a few stakeholders who have requested that Aided Schools may be considered for domestic tariff too. Further, a separate category should be created for senior citizens for getting electricity at concessional rates.

Petitioner's Submission

2.163 The Petitioner has submitted that it is the prerogative of the Hon'ble Commission to fix tariffs for different categories.

Commission's View

2.164 The suggestions received have been duly considered while finalising the respective tariff categories which are in the Tariff Design Chapter.

Stakeholders' View

2.165 No special tariff should be allowed for Dhobi Ghats and dairy farms. The various farm houses should not get supply at agriculture tariff.

Petitioner's Submission

2.166 The Petitioner has submitted that it is the prerogative of the Hon'ble Commission to fix tariffs for different categories.

Commission's View

2.167 After consideration of their suggestion, the tariff schedule has been finalised as given in the Tariff Design Chapter.

Stakeholders' View

2.168 Public utilities like Water Treatment Plant & Pumping System, MTNL, Telecom Companies are declared industry as per the Delhi Master Plan and Factory Act. However, the same are currently being billed as NDLT/NDHT consumers, the tariff for which is higher than industrial tariff.

Petitioner's Submission

2.169 The Petitioner has submitted that it is the prerogative of the Hon'ble Commission to fix tariffs for different categories.

Commission's View

2.170 Only those establishments that are having a valid factory license for MCD are eligible for industrial connection. The Commission is in the process of amending the Supply Code & Performance Standards Regulations. The Commission shall deal with this issue at the time of finalisation of Supply code and performance standard Regulations.

2.171 The respective tariff category is dealt with in the Tariff Design Chapter.

Stakeholders' View

2.172 Energy Audit should be done month wise to detect theft/loss. All supply point and nearby substation shall be metered to detect loss/theft.

Petitioner's Submission

2.173 The Petitioner has submitted that regular energy audit is being done in TPDDL at the District, Zonal, feeder and DT level to consumer level, where-in units supplied and units billed are compared, to identify the high loss making areas so that loss mitigation can be done.

Commission's View

2.174 Distribution licensees have already been directed by the Commission to carry out Energy Audit by an independent third party in their system as per the recommendation of the Standing Committee of the Parliamentary on energy.

2.175 Discoms have been submitting District/Zone wise, Distribution / AT&C losses of their system on monthly basis. Commission has already issued a directive in the last tariff order dated 26.08.2011 to reduce AT&C loss by at least 10% in respect of the Zones/Districts which are having loss in excess of 40% within one year.

Stakeholders' View

2.176 Certain consumers have appreciated the working of customer care services, timely reading of meters and billing, the staff of the companies is friendly and co-operative, improved quality of supply.

Petitioner's Submission

2.177 The Petitioner has expressed its gratitude towards the stakeholders for showing their confidence in the Distribution licensees and has assured them that the Distribution licensees is leaving no stone unturned to be the best in the industry.

Commission's View

2.178 The Commission is of the view that, it is the duty of the Distribution Licensee to provide quality service to their regular consumers.

Stakeholders' View

2.179 A genuine hike in tariff should be allowed so that the process of investment and improvement in supply of electricity is not interrupted.

Petitioner's Submission

2.180 The Petitioner has submitted that tariff needs to be cost reflective. Over the years power purchase cost has increased drastically resulting in higher supply cost whereas tariffs have not been increased in the same proportion. Deferment of legitimate increase in tariff will increase the further burden on consumers due to additional carrying cost on account of non-recovery of cost.

Commission's View

2.181 The Commission is of the view that it would be ideal to fix electricity tariff for all consumers on cost to serve basis. But considering that historically, there has been extensive cross subsidization in electricity sector, it would take time to bring about a regime with no cross subsidy. Efforts are being made by the Commission to gradually reduce the cross subsidies.

Stakeholders' View

2.182 Some of the Stakeholders feel that Distribution licensees should be brought under RTI.

Petitioner's Submission

2.183 The issue of Distribution licensees to be covered or excluded from ambit of RTI is sub-judice before the Hon'ble High court of Delhi and there is a stay order in favor of the Distribution licensees.

Commission's View

2.184 The Commission is of the view that Distribution licensees are Public Utilities and they must comply with the provisions of Right to Information (RTI) Act, 2005. The said opinion of the Commission pertaining to the status of Distribution licensees in the RTI Act was upheld by the Central Information Commission (CIC) in its Order dated 30 November 2006.

2.185 The said impugned Order of the CIC was subsequently challenged before the Hon'ble High Court of Delhi by the Distribution licensees and the said Order was stayed by the Hon'ble High Court. The Commission as one of the Respondents in this matter has filed its reply before the Hon'ble High Court of Delhi reiterating its stand that the distribution licensees should be covered under the RTI.

Stakeholders' View

2.186 Grievance Redressal at the hands of Distribution licensees is difficult as Redressal forums are establishments of Distribution licensees. As such, there is a requirement for an independent platform for the same.

Petitioner's Submission

2.187 The Petitioner feels that the contention of the stakeholders is erroneous since these Redressal forums (CGRF, Ombudsman) are statutory bodies created under the mandate of Electricity Act 2003. These forums have been accorded recognition and sanctity by the Hon'ble Supreme Court of India in various judgments. CGRF and Ombudsman are functioning under the aegis of DERC and update the DERC on performance of Discoms. Apart from this, consumers are free under existing Redressal mechanisms, to approach our various Consumer Care Centres, Call Centres, CCAG, Zonal Complaint Centres, Website etc. for getting their issues addressed.

2.188 BRPL has submitted that the Redressal forums are presided over by a retired Judge of a High Court and decide cases independently and impartially only by consent of both the parties and without intervention of the utility. It is noteworthy that the Electricity Ombudsman's report assessing the performance of the power distribution companies in Delhi over a period of six months has praised BSES DISCOMs for improving its, performance to redress consumer grievances. We further say that several new initiatives have been taken by BSES DISCOMs which resulted into significant reduction of complaints across all grievance forums.(16)

Commission's View

2.189 Consumer Grievance Redressal Forums are established in accordance with the provisions of Electricity Act, 2003 and Delhi Electricity Regulatory Commission (Redressal of Consumers' Grievances) Regulations, 2003 dated 10.06.2004. The appointment of Chairman and Members of CGRF are approved by the Commission. Ever since CGRF came into existence, about 80% of cases decided have gone in favour of consumers. Therefore, it is felt that the CGRF is functioning independently. The Distribution licensees have officers specifically for dealing with consumer grievances. The consumer grievances are also looked into by the Public Grievances Cell of the Government of NCT of Delhi which coordinates with the Distribution licensees for resolution of the grievances. The Commission has taken up the process of review of the existing regulations so as to strengthen the bodies and increase their independence.

Stakeholders' View

2.190 Distribution licensees should reduce loss by 1% as recommended by Abraham Committee.

Petitioner's Submission

2.191 Ever since privatization, Distribution licensees have been given stiff AT&C loss reduction targets on year-to-year basis, including in the MYT Control Period 2007-11. Distribution licensees have worked whole-heartedly and not only achieved these stiff targets but also over-achieved the targets. However, now that AT&C losses in the distribution area have approached acceptable minimum technical loss levels, further decrease would be increasingly arduous and will involve high order of Capex investments due to application of law of diminishing returns. Therefore, every incremental percentage decrease in loss will be extremely difficult in the case of technical losses and commercially unviable to secure in terms of human effort as well as capital investment. It may be appreciated that even to sustain AT&C losses at the present level is in itself a challenging proposition.

Commission's View

2.192 The AT&C Loss reduction trajectory prescribed by the Commission for MYT period FY 2012-13 to FY 2014-15 is much more stringent than the Abraham Committee recommendations.

Stakeholders' View

2.193 To consider the proposal of compulsory installation of AMR meters and roll out consolidated billing for large consumers with multiple connections.

Petitioner's Submission

2.194 TPDDL submitted that all consumers in the TPDDL network above 11kW are being billed through AMR Meters.

2.195 BRPL has submitted that it welcomes the suggestions of the respondent regarding consolidated billing and AMRs. BRPL has already installed AMRs for all consumers above 45kW load and efforts are on to maximize their usage. AMRs would be installed for 10kW above consumers based on techno-economic feasibility. Moreover, BRPL has implemented the SAP for consolidated billing purpose, which is already in use.

Commission's View

2.196 As informed by the distribution licensees, all consumers in Delhi having sanctioned load of 45 kW and above are on AMR metering. Regarding the issue of consolidated billing for large consumers with multiple connections, the Commission shall look into the issue separately, after the tariff order.

Stakeholders' View

2.197 Installation of CFL in place of tube lights on Street lighting to save energy.

Petitioner's Submission

2.198 The Petitioner has appreciated the suggestion while submitting that streetlights are owned by various Civic agencies like MCD etc. and the maintenance cost as well as capital cost is borne by such agencies.

Commission's View

2.199 Streetlights are owned by various civic agencies. The cost of street light maintenance and replacement of lights is borne by the road-owning agency. The Commission has specified the maintenance charges including charges of consumables, as per the specifications for street lights.

Stakeholders' View

2.200 The Distribution licensees should provide a rebate in case of early payment of bills in the same manner that they charge LPSC in case of delay in payment.

Petitioner's Submission

2.201 The Petitioner has submitted that the Commission has already provided in the Delhi Electricity Supply Code and Performance Standards Regulations 2007 that if a consumer intends to make advance payment of bills, the Licensee shall accept the same and the amount so paid shall be adjusted towards energy and other charges in the next bill. Further, Interest at the rate of 0.5% above the Savings Bank rate of State Bank of India as applicable on 1st January and 1st July of the Calendar year, for next six months, payable half yearly on such deposit shall be paid on balance amount lying unadjusted with the Licensee.

Commission's View

2.202 No such provision exists in the DERC Supply Code and Performance Standards Regulations, 2007.

Stakeholders' View

2.203 K factor cannot be allowed at more than 2.5% because most of the assets are new.

Petitioner's Submission

2.204 (TPDDL) The petitioner has submitted that it has sought the R&M based on last year R&M ratio vis-à-vis fixed assets along with inflation factor. It is submitted that addition of network in past years would require maintenance expenses in coming years.

Commission's View

2.205 The K factor for the MYT period FY 2012-13 to FY 2014-15 has been finalised in the MYT Regulations notified in Jan 2012.

Stakeholders' View

2.206 (TPDDL) The capitalization of asset in FY 2011-12 was considered at far higher rate than which has actually happened now. Pending full review and true up, no action about Regulatory Assets can be taken. All future surpluses cannot adjust from surplus revenue.

Petitioner's Submission

2.207 (TPDDL) The petitioner has submitted that it has considered the RoCE based on assets capitalization as allowed by the Commission in its order dated August 2011. As per MYT regulations; Assets capitalization will be trued up at the end of MYT Control Period i.e. along with true up of FY 2011-12.

Commission's View

2.208 The capitalization shall be firmed up at the end of the first Control period along with true up of FY 2011-12.

A3: TRUE UP FOR FY 2010-11

Background

3.1 The Commission had approved the Aggregate Revenue Requirement (ARR) of Tata Power Delhi Distribution Limited (TPDDL) for each year of the Multi Year Tariff Control Period (FY 2007-08 to FY 2010-11) in its Multi Year Tariff Order for TPDDL dated February 23, 2008. The MYT Regulations, 2007 provide for truing up of the uncontrollable parameters of the ARR at the end of each year of the Control Period based on the audited accounts and prudence check by the Commission.

3.2 TPDDL in its petition has sought truing up of the expenditure and revenue for FY 2010-11. In this Chapter, the Commission has analysed the petition of TPDDL in accordance with the principles laid down under MYT Regulations, 2007.

Revision of Revenue Gap for Past Years

3.3 The Commission in Tariff Order dated August 26, 2011 had trued up for FY 2007-08, FY 2008-09, FY 2009-10 and approved the revenue gap till FY 2009-10.

3.4 The Commission observed that while truing up for FY 2007-08, the Commission had increased the revenue available towards expenses by Rs 8.06 Cr in paragraph 3.93 of the Tariff Order dated August 26, 2010. However, while computing the total gap for FY 2007-08 in Table 70 of the Tariff Order, the Commission has inadvertently not considered this. The Commission has corrected this mistake in this Order and now approves revised revenue gap as shown below:

Table 3: Revised revenue gap now approved for FY 2007-08 (Rs Cr)

Particulars	FY 2007-08
Opening Gap	156.34
Revenue Gap for FY 2007-08 approved in Tariff Order dated May 28, 2009	183.79
Change in Depreciation	-5.82
Increase in Power Purchase Cost on account of non consideration of rebate	35.94
Reduction in ARR on account of Increase in Non Tariff Income due to inclusion of rebate on Power Purchase	-35.94
Increase in ARR on account of reduction in Non Tariff Income due to non-consideration of doubtful debt written back	0.17
Increase in ARR on account of reduction in Non Tariff Income due to non-consideration of interest income	3.06
Increase in ARR on account of reduction in Non Tariff Income due to financing cost of principal of LPSC	7.37
Reduction in ARR on account of Increase in Non Tariff Income due to Interest on Consumer Security Deposit	-5.67
Increase in A&G Expenses on account of revision of inflation index	0.15

Particulars	FY 2007-08
Increase in Employee Expenses on account of revision of inflation index	0.67
Increase in Return On Capital Employed and Supply Margin	8.42
Decrease in Employee Expenses due to Increase in Employee Expense Capitalisation	-0.07
Reduction in ARR on account of reduction of CISF expenses allowed under new initiative in FY 2007-08	-1.87
Interest Charges De-capitalized	4.52
Reduction in Gap due to Increase in revenue available towards ARR due to change in AT&C Loss	-8.06
Total	343.00
Carrying Cost (in %)	9.15%
Carrying Cost (In Rs Cr)	22.84
Closing Revenue Gap for FY 2007-08	**365.84**

3.5 Due to change in closing revenue gap for FY 2007-08, opening revenue gap for FY 2008-09 and FY 2009-10 will also change. The revised revenue gap approved till FY 2009-10 is shown below:

Table 4: Net Revenue (Gap)/ Surplus of NDPL till FY 2009-10 (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10
Opening level of Gap	(156.34)	(365.84)	(351.10)
Revenue (Gap)/Surplus approved in the True-Up Order for FY 2007-08	(183.79)		
Revenue Requirement for the year		2295.14	3259.42
Revenue at existing tariffs		2344.58	2567.42
Surplus/ (Gap) for the year		49.44	(692.00)
Additional Surplus/ (Gap) for the year on account of Hon'ble ATE Orders	(2.87)		
Closing level of (Gap)/Surplus	(341.00)	(316.40)	(1043.10)
Carrying Cost for the year @	9.15%	10.17%	8.53%
Carrying Cost	(22.84)	(34.69)	(59.46)
Closing Balance of Net (Gap)/ Surplus	**(365.84)**	**(351.10)**	**(1102.56)**

Energy Sales

Petitioner's Submission

3.6 The Petitioner has submitted total sales of 6400.17 MU for FY 2010-11 in its True up petition as against 5936.37 MU approved by the Commission in its MYT Order dated February 23, 2008. The Petitioner vide its letter dated June 20, 2012 revised the Energy Sales for FY 2010-11 (Form 2.1 (a)) to 6391.48 MU due to revision of energy sales in street light category and enforcement sales.

Commission's Analysis

3.7 The Commission analysed category-wise monthly sales data submitted by the Petitioner for each month of FY 2010-11 (under Form 2.1(a)).

3.8 The Commission also directed the Petitioner to verify the sales details submitted in Form 2.1 (a) from their billing data base for FY 2010-11.

3.9 During validation of the billing database, Petitioner's officials submitted the collection details for FY 2010-11 and verified the billing database for FY 2010-11.

3.10 The billing data for FY 2010-11 was extracted from the billing servers of the TPDDL through internet. The data extracted from the system were integrated and Form 2.1 (a) for FY 2010-11 was prepared. Form 2.1 (a) generated from the billing server shown total sales as 6401.20 MU, difference of 1.03 MU. As the billing software is dynamic and several entries might have been changed for FY 2010-11 since the generation of Form 2.1(a), the Commission accepted this minor variation.

3.11 During the validation session, the Commission inquired about the methodology adopted by the Petitioner to record sales against cases of enforcement. The Petitioner informed the Commission that MU recorded as sales against cases of enforcement were derived by dividing the total payment received against enforcement cases by average billing rate for the year. As per Electricity Act, in all cases of enforcement/theft, energy has to be billed at twice the rate of the normal tariff. Ideally, the Petitioner should have divided the total payment received against enforcement cases by two times of average billing rate for the year to arrive at MU recorded as sales.

3.12 In Form 2.1 (a) for FY 2010-11, the Petitioner has shown sales against enforcement as 44.94 MU by dividing the total payment received against enforcement cases by average billing rate for the year. The Petitioner vide its letter dated June 20, 2012 revised Form 2.1 (a) on account of revision of energy sales to street light category, which resulted in change of average billing rate of the Petitioner. Due to change in average billing rate, the Petitioner also revised units recorded under theft as 44.88 MU. The Commission has corrected this figure and approve revised sales against enforcement as 22.44 MU.

3.13 The Commission observed that the energy billed shown by the Petitioner for August 2010 under street light category was abnormally high (14.17 MU) and energy charges shown against these units were lower (Rs 2.99 Cr), which resulted in lower per unit energy charge (Rs 2.11 per unit) vis-a-vis Commission approved tariff (Rs 4.65 per unit). The officer of the TPDDL submitted that in August 2010, the initial bill for street light for MCD was raised based upon meter reading which were rejected by MCD. These bills were revised later, but energy billed considered in the Form 2.1 (a) were not revised.

3.14 The Commission directed the Petitioner to submit revised figures of energy sales of street light category for each month of FY 2010-11. The Petitioner vide its letter dated June 20, 2012 revised energy sales to street light category in Form 2.1 (a) for FY

2010-11 from 88.77 MU to 80.17 MU, a reduction of 8.60 MU. While approving the sales for FY 2010-11, the Commission has considered revised energy sales figures submitted by the Petitioner.

3.15 The Commission also observed that own consumption of TPDDL has remained constant at 1.6 MU in every month. The Petitioner has submitted total own consumption as 19.2 MU for FY 2010-11. The Commission directed the Petitioner to provide explanation for constant own consumption. The Petitioner's officials informed that own consumption has been recorded on normative basis as per directives of the Commission and not on the actual basis. It was also observed that Petitioner has been submitting own consumption as 19.2 MU in previous years also as determined by the Commission. The Commission directed TPDDL to indicate the letter where own consumption has been fixed at 19.2 MU for the Petitioner by the Commission, however no such letter was produced by the Petitioner.

3.16 The Commission has decided that 0.25% of total units sold during FY 2010-11 may be taken as bench mark on normative basis for determining 'self consumption' for FY 2010-11. An increment at the rate of 2% (of the previous year's 'self consumption') may be added each year till FY 2014-15. These norms will be reviewed after the end of the Control Period.

3.17 The Commission also inquired about the methodology adopted by the Petitioner to record sales against cases of misuse of energy. The Petitioner informed the Commission that MU recorded as sales while preparing form 2.1 (a) against cases of misuse were not the actual MU billed but derived by dividing the amount billed against misuse of energy by average billing rate for misuse category (i.e. if a domestic category consumer is booked for non-domestic misuse, in Form 2.1 (a), units shown will be amount billed to the consumer divided by average billing rate of non-domestic category). The Commission noted, with concern, the methodology adopted by the Petitioner, as it was inflating the energy billed shown in form 2.1 (a) in case of misuse of energy and asked for an explanation for the same.

3.18 The officers of the Petitioner submitted that the practice is being followed by the Petitioner since FY 2002-03. Also, they could not provide any explanation/justification for adoption of this methodology on their part. The Commission directed the Petitioner to submit the actual units billed under misuse of energy cases and units considered by the Petitioner in form 2.1 (a) for FY 2010-11. The Petitioner vide its letter dated May 9, 2012 submitted to the Commission that additional units shown in form 2.1 (a) due to the above mentioned methodology was 11.81 MU.

3.19 The Commission directed the Petitioner to provide details of the working for 11.81 MU and submit details of actual misuse units and misuse units considered by the Petitioner for FY 2002-03 – FY 2010-11.

3.20 The Petitioner vide its letter dated May 17, 2012 submitted month wise category wise additional misuse units considered for FY 2010-11. Total 11.82 MU additional misuse units were considered in Form 2.1 (a) as per the submission on the Petitioner.

3.21 The Commission analysed the information submitted by the Petitioner and observed following:

(a) Amount billed and units billed submitted by the Petitioner were giving a average billing rate which was 20 – 30 times higher than billing rate as per Commission approved tariff

(b) For some categories, the number of units considered in Form 2.1 (a) was less than 2 times of the units billed, while for one category it was 4 – 5 times. If the consumer is billed for misuse (where he is being billed at twice of the approved rate of misuse category) and if units derived are arrived by dividing bill amount with average billing rate, the number of units considered in Form 2.1 (a) would be approximately twice of the units actual billed.

3.22 The Commission directed the Petitioner to provide explanation for the same.

3.23 The Petitioner vide its letter dated June 13, 2012 submitted category-wise actual units billed and units finally considered in Form 2.1 (a) along with the average billing rate for misuse cases and billing rate used to derive units which were actually considered by the Petitioner.

3.24 The Commission analysed the data submitted by the Petitioner but the methodology adopted by the Petitioner was still not clear. The Commission gave another opportunity to the Petitioner and directed them to provide explanation on the methodology followed by the Petitioner for deriving misuse units considered by it while preparing Form 2.1 (a).

3.25 The Commission held validation session on June 20, 2012 with the Petitioner officials on methodology followed by the Petitioner for calculation of misuse units which were actually considered by the Petitioner. During the validation the Petitioner's officials submitted the following:

(a) For agriculture consumers, who were misusing energy for domestic / industrial / commercial purpose, misuse units considered in Form 2.1 (a) were derived from actual amount billed divided by average billing rate for agriculture consumers.

(b) For domestic consumers, who were misusing energy for unauthorised domestic extension/ industrial / commercial purpose units considered in Form 2.1 (a) were derived from actual amount billed divided by average billing rate for commercial consumers.

(c) For commercial consumers, who were misusing energy for unauthorised commercial extension, misuse units considered in Form 2.1 (a) were derived from actual amount billed divided by average billing rate for commercial consumers.

(d) For industrial consumers, who were misusing energy for industrial extension/ commercial purpose, misuse units considered in Form 2.1 (a) were derived from actual amount billed divided by average billing rate for commercial consumers.

(e) The petitioner indicated that this methodology was adopted for only those consumers for whom misuse flag was 'ON' in the billing database as on March 31, 2011. Energy billed figures were revised while recalculating the units for Form 2.1 (a).

3.26 After analysing the information submitted by TPDDL on sample basis and going through submissions of the Petitioner, the Commission was still not convinced with the methodology adopted by the Petitioner for calculation of revised units to 'misuse' in Form 2.1(a). The methodology submitted by the Petitioner using which the Petitioner has arrived at additional misuse units of 11.82 MU is inconsistent and varies from case to case, for e.g. an agriculture consumer who was energy for domestic / industrial / commercial purpose, misuse units considered in Form 2.1 (a) were derived from actual amount billed divided by average billing rate for agriculture consumers (original category) while for a industrial consumer, who was misusing energy for industrial extension/ commercial purpose, misuse units considered in Form 2.1 (a) were derived from actual amount billed divided by average billing rate for commercial consumers (misuse category), a domestic consumers, who was misusing energy for unauthorised domestic extension/ industrial / commercial purpose, misuse units considered in Form 2.1 (a) were derived from actual amount billed divided by average billing rate for commercial consumers although misuse category in each of the case was different.

3.27 The Commission also does not accept the submission of the Petitioner that it has revised energy billed only for consumers whose misuse flag was 'ON' in the billing database as on March 31, 2011. The Petitioner submits Form 2.1 (a) on monthly basis and Form 2.1 (a) for the full year is nothing but addition of the monthly Form 2.1 (a) submitted during the year. For example, while submitting Form 2.1 (a) for June, the Petitioner would consider all consumers whose misuse flag is 'ON' in June. If the misuse flag is turned off in later months, say August, misuse will not appear in Form 2.1 (a) of August. If we go by the methodology submitted by the Petitioner, than Petitioner will not consider this misuse while preparing Form 2.1 (a) for full year, which will result in variation of monthly Form 2.1(a) and Form 2.1 (a) for the full year.

3.28 The Commission, therefore, is not able to accept the figure of 11.82 MU which is the difference in energy billed figures vis-à-vis that provided in form 2.1 (a).

3.29 The Petitioner vide its letter dated June 13, 2012 submitted actual misuse units and misuse units considered in Form 2.1 (a) for FY 2007-08 – FY 2009-10, however, it has not provided any back up data for support. The Petitioner has also not submitted details of actual misuse units and misuse units considered in Form 2.1 (a) for FY 2002-03 – FY 2006-07. The Commission directs the Petitioner to submit details of actual misuse units and misuse units considered in Form 2.1 (a) by the Petitioner along with the backup data for FY 2002-03 - FY 2010-11 within 2 months of issuance of this Tariff Order.

3.30 Hence for truing up of sales for FY 2010-11, the Commission has not been able to arrive at the sales for the year due to the Petitioner's inability to produce explanations and justifications for the methodology adopted by them, as explained above. Thus, the Commission is has not approved energy sales figures for FY 2010-11.

AT&C Losses

Petitioner's Submission

3.31 The Petitioner has submitted that it has achieved the AT&C loss level of 13.10% in FY 2010-11 as against the target AT&C loss level of 17.00% prescribed in the MYT Order.

3.32 The Petitioner has submitted that total energy received for the consumption during the FY 2010-11 is 7305.68 MU.

3.33 The Petitioner has submitted its computation for AT&C loss level of 13.10% achieved during FY 2010-11 as summarised below:

Table 5: AT&C loss for FY 2010-11 as submitted by the Petitioner

S. No	Particulars	Units	FY 2010-11	Remarks
A	Units Consumed at TPDDL Periphery for TPDDL Consumers	MU	7305.68	
B	Units Billed	MU	6400.17	
C	Amount Billed	Rs Cr	2970.28	
D	Distribution Loss	%	12.39%	(1 - B/A)
E	Amount Collected	Rs Cr	2946.46	
F	Collection Efficiency	%	99.20%	F = E/C
G	Units Realized	MU	6348.87	G = (B x F)
E	AT&C Loss Level	%	13.10%	E = 1 – (G/A)

3.34 The reconciliation of collection from audited balance sheet as submitted by the Petitioner is shown below:

Table 6: Reconciliation of Collection as submitted by the Petitioner

Particulars	Petitioner's Submission
Opening Debtors as on 1 April 2010	224.34
Add:	
Sale	2959.19
LPSC	17.44
DVB Arrears (Non Govt)	0.15
Difference in subsidy billed and collected	2.00
Total	3203.12
Less:	
Doubtful Debts	(7.42)
Closing Debtors as on 31 March 2011	264.07
Total Collection	2946.46

3.35 The Petitioner through its letter dated April 2, 2012 revised the subsidy collected amount for FY 2010-11 as Rs 50.66 Cr from Rs 50.78 Cr as shown in the true up petition, resulting in increased difference in subsidy billed and collected (Rs 2.12 Cr) and thus increase in total collection to Rs 2946.58 Cr.

3.36 The Petitioner has claimed a total benefit of Rs. 132.35 Cr (as computed in table below) on account of overachievement of 3.90% in AT&C loss reduction during FY 2010-11.

Table 7: Computation of Overachievement Incentive as submitted by the Petitioner

Particulars	Units	Target Level X	Actual Y
A. AT&C Losses	%	17.00%	13.10%
B. Over Achievement/ (Under Achievement)	%		3.90%
C. Energy Input	MU	7305.68	
D. Units Realized	MU	6063.62	6348.87
E. Average Billing Rate	Rs/unit	4.6409	4.6409
F. Amount Realized	Rs Cr	2814.11	2946.46
G. Total benefit on account overachievement beyond Target level (Y - X)	Rs Cr	132.35	
Profit Sharing between TPDDL and Contingency Reserve			
H. Benefit on account of over achievement from minimum AT&C loss reduction level (17%) and 15%	Rs Cr	67.81	
I. Benefit on account of over achievement of AT&C loss reduction beyond 15% i.e. 15% and 13.10%	Rs Cr	64.54	
J. Benefits to be retained by the Petitioner (50% up to 15% and 100% beyond 15%)	Rs Cr	98.44	
K. Benefits to be utilized to meet Revenue Gap (G - J)	Rs Cr	33.91	
L. Total Revenue available towards ARR for FY 2010-11 including E Tax, DVB Arrears Collected and LPSC at Target AT&C Loss Level (F - J)	Rs Cr	2814.11	
M. Add: Consumer's share on account of over achievement	Rs Cr	33.91	
N. Less: E Tax Paid	Rs Cr	126.51	
O. Less: 80% of DVB Arrears	Rs Cr	0.12	
P. Less: LPSC considered in NTI	Rs Cr	17.44	
Q. Less: Commission on DVB arrears considered as Other Income	Rs Cr	0.03	
R. Revenue available for Expenses (L+M-N-O-P-Q)	Rs Cr	2703.92	

Commission's Analysis

3.37 As per the MYT Order dated February 23, 2008, the Commission has considered 6.73% reduction in AT&C losses (23.73% in FY 2006-07 to 17.00% in FY 2010-11) for the Control Period. The Commission has further observed in the MYT Order:

"……….. The Commission has also considered reduction of 25% of the total AT&C loss reduction target in each year of the Control Period. As specified in the MYT Regulation, 2007; the Petitioner has to reduce a minimum of 20% of the total AT&C loss reduction target for the Control Period in any year of the Control Period.

4. 34 For the purpose of calculating the incentive/ penalty on account of over/under achievement of AT&C loss reduction target the Commission would consider the following:

(a) *First year of the Control Period: The Petitioner shall be eligible for an incentive if the AT&C loss reduction in the first year of the Control Period is above 25%. Any under recovery in the revenue realised, if the AT&C loss reduction in the first year of the Control Period is below 20%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the AT&C loss reduction in the first year of the Control Period is between 20% and 25%.*

(b) *Second year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction in that year and in the previous year is over 50%. Any under recovery in the revenue realised, if the AT&C loss reduction in the second year of the Control Period is below 20% and that the cumulative value of loss reduction in that year and in the previous year is below 45%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the cumulative AT&C loss reduction in the first and second year of the Control Period is between 45% and 50%.*

(c) *Third year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction in that year and in the previous two years is over 75%. Any under recovery in the revenue realised, if the AT&C loss reduction in the third year of the Control Period is below 20% and that the cumulative value of loss reduction in that year and in the previous two years is below 70%, shall be to the account of the Petitioner. The Petitioner shall not be eligible for any incentive or penalty if the cumulative AT&C loss reduction in the first, second and third year of the Control Period is between 70% and 75%.*

(d) *Last year of the Control Period: The Petitioner shall be eligible for an incentive if the cumulative value of loss reduction at the end of the Control Period is over 100%. Any under recovery in the revenue realised, if the AT&C loss reduction in the last year of the Control Period is below 20% and that the cumulative value of loss reduction at the end of the Control Period is below 100%, shall be to the account of the Petitioner.. The Petitioner shall not be* *eligible for any incentive or penalty if the cumulative AT&C loss reduction at the end of the Control Period is 100%."*

3.38 A comparison of the AT&C loss level specified in the MYT Order and the actual AT&C loss level claimed by the Petitioner during FY 2010-11 is mentioned below:

Table 8: AT&C loss for FY 2010-11 as submitted by the Petitioner

Particulars	Approved in the MYT Order	Petitioner's Submission
AT&C Loss Target	17.00%	13.10%

3.39 For verification of the energy input, the Commission directed State Load Dispatch Centre (SLDC) to submit the energy input for the Petitioner during FY 2010-11. SLDC submitted to the Commission that total energy input to TPDDL for FY 2010-11 was 7305.68 MU, which was same as shown by the Petitioner.

3.40 However, the Commission analysed category-wise monthly sales data submitted by the Petitioner for each month of FY 2010-11 (under Form 2.1(a)), but could not arrive at the sales figure for the year, as detailed in the section above.

3.41 The Commission gave an opportunity to the Petitioner to establish its claim on AT&C loss reduction and directed the Petitioner to show the relevant back up data with respect to energy billed (in MU and Rs Cr) and revenue collected (in Rs Cr) for FY 2010-11.

3.42 With reference to amount billed, the Commission observed that revenue billed during the FY 2010-11 is shown as Rs 2970.31 Cr as submitted by the Petitioner in revised Form 2.1 (a) (submitted on June 20, 2012).

3.43 For the purposes of the validation of the revenue collected in FY 2010-11, the Petitioner was required to give supporting data to substantiate Form 2.1(a) and also to bring evidence in support of the entries. Specific requests were made to the Petitioner to bring source data for verifying the authenticity/credibility of the evidence being relied upon. In order to conduct the prudence check to verify the reliability of data contained in Form 2.1(a), the Petitioner was directed to produce month-wise billing and collection details (category-wise) and daily collection details for the FY 2010-11.

3.44 The Petitioner submitted the daily collection details and billing database for FY 2010-11.The Petitioner has submitted Rs 2946.58 Cr as revenue collected during FY 2010-11 on sale of electricity.

3.45 During the validation session, the Petitioner was able to derive Rs 2946.58 Cr from the audited accounts of the Petitioner. However, the collection details derived from the system of the Petitioner was Rs 2946.92 Cr, a difference of Rs 0.46 Cr. The Petitioner could not explain the reason for difference in the collection as per the system and in the audited accounts. As difference, is minor amount, the Commission has accepted the details appearing in the audited accounts of the Petitioner. The

Petitioner was able to match daily collection details shown to the Commission with the bank statements of the Petitioner.

3.46 Further, the Commission observes that the revenue collection of Rs 2946.58 Cr includes the gross LPSC of Rs 17.44 Cr collected by the Petitioner. However, as financing of LPSC is allowed as a cost to the Petitioner, the consumers get benefit of net LPSC in Non tariff Income (which is subtracted from the ARR of the Petitioner). As consumers do not get benefit of gross LPSC, it will be prudent for the Commission to consider the LPSC net of financing expenses in revenue collection. As the Commission has approved Rs 9.20 Cr towards the financing cost of LPSC for FY 2010-11, the Commission has subtracted this from the revenue collected. Thus revenue collected has been considered as Rs 2937.38 Cr.

3.47 The revenue collection reconciled by the Petitioner and approved by the Commission is shown below:

Table 9: Reconciliation of Collection as approved by the Commission

Particulars	Petitioner's Submission
Opening Debtors as on 1 April 2010	224.34
Add:	
Sale	2959.19
LPSC	8.24
DVB Arrears (Non Govt)	0.15
Difference in subsidy billed and collected	2.12
Total	3194.04
Less:	
Doubtful Debts	(7.42)
Closing Debtors as on 31 March 2011	264.07
Total Collection	**2937.38**

3.48 In view of the above, the Commission approves revenue available towards expenses for FY 2010-11, as shown below:

Table 10: Revenue available for expenses approved by the Commission for FY 2010-11 (Rs Cr)

Particulars	FY 2010-11
Opening Debtors as on 1 April 2010	224.34
Add:	
Sale	2959.19
LPSC	8.24
DVB Arrears (Non Govt)	0.15
Difference in subsidy billed and collected	2.12
Total	3194.04
Less:	
Doubtful Debts	(7.42)

Particulars	FY 2010-11
Closing Debtors as on 31 March 2011	264.07
Total Collection	**2937.38**
Less: Net LPSC Considered as Other Income	*8.24*
Less: Commission on DVB arrears considered as Other Income	*0.03*
Less: E Tax	*126.51*
Revenue available for Expenses	**2802.60**

3.49 The total revenue available towards ARR for FY 2010-11 has been computed by the Commission to be Rs. 2802.60 Cr.

3.50 As mentioned in paragraph 3.30, the Commission has not been able to arrive at the sales for the year due to the Petitioner's inability to produce explanations and justifications for the methodology adopted by them. Thus, the Commission has not approved energy sales figures and subsequently, AT&C loss for FY 2010-11 and the corresponding incentive/penalty.

3.51 With regards to the period prior to FY 2010-11, the Commission will revise AT&C Losses for FY 2002-03 - FY 2009-10 after incorporating the changes due to misuse units as indicated in paragraph 3.29 and the corresponding incentive/penalty.

Power Purchase Quantum

Petitioner's Submission

3.52 Against the actual sales of 6400.17 MU during FY 2010-11, the Petitioner has claimed a net power purchase requirement of 7315.91 MU. The Petitioner also submitted that this include 7.09 MU of energy of FY 2009-10, which were booked in FY 2010-11 but considered by Commission in FY 2009-10 (for determination of energy input for AT&C loss) and 3.16 MU on account of difference in provision made on UI and Inter State bills and actual bills. Thus total energy input at Discom periphery for own consumption was 7305.68 MU.

3.53 The Petitioner has submitted that the gross power purchase quantum for FY 2010-11 was 8798.01 MU. Further, the Petitioner has provided the details of 1062 MU of surplus energy sold/banked.

3.54 After deducting the inter-state transmission loss (PGCIL loss) of 304.06 MU and intra-state (DTL) transmission loss of 116.04 MU, the Petitioner has submitted a net power purchase quantum of 7315.91 MU for FY 2010-11.

Table 11: Power Purchase Quantum for FY 2010-11 as claimed by the Petitioner (in MU)

Source	Approved in MYT Order	Petitioner's Submission
Gross Power Purchase Quantum	8330.56	8798.01
Power Sold To Other Sources	880.12	1062

Source	Approved in MYT Order	Petitioner's Submission
Net Power Purchase	7450.44	7736.01
Transmission Losses:		
Inter-State Transmission Losses	254.96	304.06
Intra-State Transmission Losses	78.99	116.04
Total Transmission Losses	333.95	420.10
Net Power Available after Transmission Losses	7116.49	7315.91

Commission's Analysis

3.55 The Commission, in its MYT Order dated February 23, 2008, had approved net power purchase quantum of 7450.44 MU from all sources including central sector generating stations, inter-state bilateral, intra-state power and Delhi generating stations for FY 2010-11.

3.56 It is observed that the actual power purchase quantum for the Petitioner was higher than quantum approved by the Commission due to higher actual energy demand in the Petitioner's distribution area vis-à-vis the demand considered by the Commission in the MYT Order and higher transmission losses than approved in the Tariff Order.

3.57 The Commission directed the Petitioner to submit month wise station wise power purchase details along with the bills which was complied with by the Petitioner.

3.58 The Commission has reviewed the month wise station wise power purchase details submitted by the Petitioner and cross checked the same with the Monthly Regional Energy Accounts for FY 2010-11. During the validation, the Commission observed that the power purchase cost and quantum for month of April 2010 and March 2011 were different for TPDDL. The Petitioner explained that this is on account of provisions considered in quantum and cost of power purchase in the year FY 2009-10 and FY 2010-11 for the bills not received during that period. The Petitioner also submitted that it has made a provision of -8.05 MU and Rs 26.32 Cr in FY 2010-11 in the power purchase cost and quantum respectively against the expected bills.

3.59 The Commission directed the Petitioner to submit details of Provisions made with respect to power purchase cost and quantum in FY 2009-10 and FY 2010-11 and details of adjustment in power purchase cost of the next year with respect to these provisions, which was duly complied with by the Petitioner.

3.60 For calculation of AT&C loss the Commission has considered actual Power Purchase quantum as per the submission of the SLDC and approves net power purchase quantum of 7305.68 MU.

3.61 The Commission directed the Petitioner to submit the details of process followed by the Petitioner for load forecast, projection of surplus /deficit power, procurement / sale of deficit / surplus power.

3.62 The Commission observed that the Petitioner was using a fixed percentage increase for projection of demand, where actual demand of last year was increased by a fixed percentage. Projected demand was used to project surplus / deficit of power and Petitioner entered into short term power purchase contracts based on the requirement so computed. The Commission noted with concern that neither any software tools was used by the Petitioner nor any adjustment for weather forecast, increase in population, pending connections, change in specific consumption of consumers was made by the Petitioner.

3.63 The Petitioner has submitted that it had floated tenders for sale of surplus short term power during the winter months; however, very few offers were received at very low bids due to which TPDDL did not place any offer through tenders.

3.64 It was observed that TPDDL has purchased total 1522.66 MU from bilateral/exchange/UI. TPDDL has purchased 1032.66 MU (66.52%) of energy from bilateral sources, 383.17 MU (24.68%) of energy from banking, 43.16 MU (2.78%) from exchange and 88.94 MU (5.73%) of energy from UI.

3.65 During the validation session, it was observed that TPDDL has sold 1062 MU surplus energy, out of which 754.70 MU (71.06%) of sold through UI, 160.27 MU (15.09%) was banked, 111.93 MU (10.54%) was sold through exchange and only 35.09 MU (3.30%) was sold through bilateral arrangements.

3.66 The Commission also observed that TPDDL has shown power purchase quantum and cost from its own Rithala and Solar Generating Stations. TPDDL has shown 32.11 MU of energy purchased from Rithala Generating Stations at total cost of Rs 22.65 Cr during February 2011 and March 2011. The Commission further observed that 7.24 MU in February 2011 and 12.64 MU in March 2011 was drawn by TPDDL from its own Rithala Generating Station when TPDDL was under drawing from grid (selling power under UI).

3.67 TPDDL has shown 0.43 MU of energy purchased from Own Solar Generating Stations at total cost of Rs 0.95 Cr.

3.68 The Commission is currently not able to verify the power purchase quantum from TPDDL's own Rithala and Solar Generating Stations. The Commission has provisionally approves power purchase quantum from these stations as submitted by TPDDL.

3.69 The Commission also observed that 56.88 MU was purchase under UI from Rithala station out of which 2.04 MU was due to over injected after commissioning of the station. Similarly 2.19 MU was under injected by Rithala station, out of which 2.17 MU was under injected after commissioning of the station.

3.70 Scheduling of the Rithala Generating Station is being done by the TPDDL only. The Commission is not able to verify the UI quantum and provisionally allow the UI quantum.

Power Purchase Cost

Petitioner's Submission

3.71 The Petitioner has submitted gross power purchase cost of Rs. 3180.53 Cr. against the gross power purchase quantum of 8798.01 MU in FY 2010-11 from all sources including Intra-state, Bilateral and UI. From the gross power purchase cost, the revenue realized of Rs. 314.77 Cr on account of sale of surplus energy through bilateral, intra-state and UI has been deducted.

3.72 Further, the Petitioner has claimed total transmission charges of Rs. 247.12 Cr for the total power purchased during FY 2010-11.

3.73 Considering the above power purchase and transmission cost, the Petitioner has claimed total power purchase cost of Rs. 3112.88 Cr during FY 2010-11 for True-Up.

Table 12: Power Purchase Cost for FY 2010-11 as claimed by the Petitioner (Rs Cr)

Source	Approved in MYT Order	Petitioner's Submission
Gross Power Purchase Cost	2185.63	3180.53
Power Sold To Other Sources	300.23	314.77
Net Power Purchase Cost	1885.41	2865.76
Transmission Charges		
Inter-State Transmission Charges	97.92	136.58
Intra-State Transmission Charges	110.74	110.54
Total Transmission Charges	108.66	247.12
Net Power Purchase Cost including Transmission Charges	**2094.07**	**3112.88**

Commission's Analysis

3.74 The Commission, in its MYT Order dated February 23, 2008 had approved total power purchase cost (including transmission charges) of Rs. 2094.07 Cr as against Rs. 3112.88 Cr claimed by the Petitioner for FY 2010-11. The increase in power purchase cost claimed by the Petitioner against the cost approved by the Commission in its Order is primarily on account of increase in quantum of units purchased through bilateral sources, increase in per unit rate of bilateral power purchase, lower rate for sale of surplus power and increase in the variable cost on account of escalation in fuel prices during FY 2010-11.

3.75 The Commission has verified the station wise month wise power purchase cost shown by the Petitioner with the bills received by the Petitioner on sample basis.

3.76 For verification of cost of short term power purchase, the Commission directed the Petitioner to submit the details of the process followed by the Petitioner for purchase/sale of short term power. The Petitioner informed the Commission that it has issued tender for procurement of short term power in January 2010 for the period from April 2010 to September 2010. It was noted that signing of the contracts using bid received through tender was done only in month of February 2010. It was further observed that TPDDL entered into most contracts for the period April-September 2010 way ahead in the month of February 2010 and April 2010.

3.77 For those contacts entered in April 2010, a competitive bidding process was not followed. As such, there were no supporting documents to validate the selection of the contracts against all the offers that may have been received.

3.78 The Commission observed that TPDDL had entered into Round The Clock (RTC) power purchase contracts for the months of May, June, July, August and September 2010 at a price ranging from Rs 4.57 per unit to Rs 7.54 per unit. TPDDL has submitted that the contracted price was the best amongst the offers received by them.

3.79 The Commission further observed that TPDDL, during FY 2010-11, had only compared one RTC offer with another and did not explore the option of randomizing between two different offers with lower prices (which were not RTC but for different time slots), so that the average price could have been lower than the cost of RTC power that was finally contracted. Such kind of optimization was, in most instances, not present.

3.80 TPDDL has submitted that it had floated tenders for sale of surplus short term power during the winter months; however, very few offers were received at very low bids due to which TPDDL did not place any offer through tenders.

3.81 TPDDL has purchased total 1522.66 MU from bilateral/exchange/UI. TPDDL has purchased 1032.66 MU (66.52%) of energy from bilateral sources, 383.17 MU (24.68%) of energy from banking, 43.16 MU (2.78%) from exchange and 88.94 MU (5.73%) of energy from UI.

3.82 TPDDL has incurred Rs 862.50 Cr (@ Rs 5.56 per unit) in short term power procurement, out of which Rs 621.55 Cr (72.06% @ Rs 6.02 per unit) was incurred in bilateral energy purchase, Rs 163.44 Cr (18.95% @ Rs 4.27 per unit) was incurred for purchase of energy under banking, Rs 47.41 Cr (5.50% @ Rs 5.33 per unit) was incurred for UI and Rs 28.69 Cr (3.33% @ Rs 6.65 per unit) was incurred for purchase of energy from exchange.

3.83 TPDDL has sold 1062 MU surplus energy, out of which 754.70 MU (71.06%) of sold through UI, 160.27 MU (15.09%) was banked, 111.93 MU (10.54%) was sold through exchange and only 35.09 MU (3.30%) was sold through bilateral arrangements.

3.84 TPDDL has earned Rs 314.77 Cr (@ Rs 2.96 per unit) in short term power procurement, out of which Rs 200.89 Cr (63.82% @ Rs 2.66 per unit) was earned through sale of energy under UI, Rs 60.34 Cr (19.17% @ Rs 3.76 per unit) was earned through sale of energy under banking, Rs 41.11 Cr (13.06% @ Rs 3.67 per unit) was earned through sale of power through exchange and Rs 12.44 Cr (3.95% @ Rs 3.54 per unit) was incurred for purchase of energy from exchange.

3.85 The Commission noted with concern that TPDDL has sold maximum power under UI mechanism (approx 10% of own requirement, and 71% of the total surplus power). The gross energy cost for TPDDL was Rs 3.615 per unit (even after short term power purchase @ Rs 5.56 per unit, without short term power, the gross energy was purchased @ Rs 3.20 per unit), while the net energy cost for TPDDL was Rs 3.92 Per unit (after considering sale of surplus power @ Rs 2.96 per unit and transmission loss of 420.10 MU).

3.86 The Commission observed that there was scope for better management of the process of short term power purchase and sale of surplus power so as to significantly promote the interests of the consumers. Contracts for short term power purchase were finalised very early in the year and for most of them, competitive process was not followed. Majority of the sale of surplus power (71%) was through UI mechanism where the yield was significantly less and it appears that that no efforts were made to sell through exchange or bilateral sources where better yields are expected. 2/3rd of the short term power procurement (in quantum) was sold with a yield equivalent to 1/3rd of the cost incurred in short term power purchase.

3.87 During the validation, the Commission also observed that the power purchase cost and quantum for month of April 2010 and March 2011 were different for TPDDL. The Petitioner explained that this is on account of provisions considered in quantum and cost of power purchase in the year FY 2009-10 and FY 2010-11 for the bills not received during that period. The Petitioner also submitted that it has made a provision of -8.05 MU and Rs 26.32 Cr in FY 2010-11 in the power purchase cost and quantum respectively against the expected bills.

3.88 The Commission directed the Petitioner to submit details of Provisions made with respect to power purchase cost and quantum in FY 2009-10 and FY 2010-11 and details of adjustment in power purchase cost of the next year with respect to these provisions, which was duly complied with by the Petitioner.

3.89 The Commission observes that provisions made by the Petitioner with reference to the power purchase cost in FY 2010-11 were adjusted against the bills received as late as July 2011/Aug 2011. Therefore, the Commission has decided to not to allow any provision against power purchase cost made by the Petitioner and considered the actual cost incurred. The provision of power purchase cost not considered in FY 2010-11 will be considered while truing up for FY 2011-12, when the actual bill was received and paid.

3.90 The Commission also observed that TPDDL has shown power purchase quantum and cost from its own Rithala and Solar Generating Stations. TPDDL has shown 32.11 MU of energy purchased from Rithala Generating Stations at total cost of Rs 22.65 Cr during February 2011 and March 2011. The Commission further observed that 7.24 MU in February 2011 and 12.64 MU in March 2011 was drawn by TPDDL from its own Rithala Generating Station when TPDDL was under drawing from grid (selling power under UI).

3.91 TPDDL has shown 0.43 MU of energy purchased from Own Solar Generating Stations at total cost of Rs 0.95 Cr.

3.92 The Commission has considered cost of power from Rithala Generating Station when TPDDL is drawing from Rithala and selling under UI at UI sale rate for TPDDL as surplus power, as generation from Rithala Generating Station was not required to meet TPDDL's load in these time slots. For remaining energy from Rithala Generating Station, the Commission has provisionally considered at the average power purchase cost of gross power (Rs 3.615 per unit) as tariff has not been determined for TPDDL's Rithala Generating Station. The Commission approves Rs 6.40 Cr towards 19.87 MU purchased by TPDDL from Rithala Generating Station when TPDDL was under drawing from grid, Rs 4.42 Cr towards remaining 12.24 MU purchased from Rithala Generating Station and Rs 0.15 Cr towards 0.95 MU purchased from Solar Generating Stations. The total approved power purchase cost for Rithala and Solar Generating Station is Rs 10.98 Cr, resulting in to disallowance of Rs 12.62 Cr from power purchase cost.

3.93 The Commission further observes that 56.88 MU was purchase under UI from Rithala Generating Station out of which 2.04 MU was due to over injection after commissioning of the station. Similarly 2.19 MU was under injected by Rithala station, out of which 2.17 MU was under injected after commissioning of the station. Scheduling of the Rithala Generating Station is being done by the TPDDL only. The Commission therefore while calculating power purchase cost, has not considered UI sale purchase from Rithala after commissioning of the Rithala Generating Station. The Petitioner has incurred Rs 1.15 Cr in power purchase under UI and earned Rs 0.49 Cr in power sale under UI to Rithala Generating Station. The Commission has reduced Rs 0.66 Cr from power purchase cost of the Petitioner on this account.

3.94 The Commission further observes that UI charges paid by the Petitioner also includes Penal UI charges of Rs 3.81 Cr. The Commission has as a member of FOR has already decided that any Penal UI charges will not be allowed in the power purchase cost, therefore the Commission has not considered Penal UI charges in power purchase cost.

3.95 The Commission approves the total power purchase cost for FY 2010-11 at Rs. 3070.91 Cr after verification of power purchase bills for FY 2010-11 as mentioned below:

Table 13: Trued-up Power Purchase Cost for FY 2010-11 (Rs Cr)

Source	Approved in MYT Order	Petitioner's Submission	Now Approved
Gross Power Purchase Cost	2185.63	3180.53	3180.53
Power Sold To Other Sources	300.23	314.77	314.77
Net Power Purchase Cost	1885.41	2865.76	2865.76
Transmission Charges			
Inter-State Transmission Charges	97.92	136.58	136.58
Intra-State Transmission Charges	110.74	110.54	110.54
Total Transmission Charges	108.66	247.12	247.12
Net Power Purchase Cost including Transmission Charges	**2094.07**	**3112.88**	**3112.88**

Source	Approved in MYT Order	Petitioner's Submission	Now Approved
Less: Provision included by TPPDDL in Power purchase cost			26.32
Less: Reduction in power purchase cost on account of provisional allowance of power purchase cost @ gross energy rate for Rithala and Solar station			12.62
Less: Disallowance on UI Power from Rithala Generating Station post Commission			0.66
Less: Penal UI Charges			3.81
Power Purchase Cost Trued Up	**2094.07**	**3122.88**	**3069.47**

Review of Controllable Parameters

3.96 As per Regulation 8.8 and 11.2 of the MYT Regulations, the Petitioner is required to submit information as a part of annual review on actual performance to assess the performance vis-à-vis the targets approved by the Commission. The Petitioner in its petition has submitted expenses on account of Controllable Parameters for FY 2010-11 as approved by the Commission in MYT Order.

3.97 As per Regulation 4.7 of the MYT Regulations, 2007, the Commission has specified targets for controllable parameters which inter alia include Operation & Maintenance expenditure (comprising employee expenses, repair & maintenance expenses, administration & general expenses and other miscellaneous expenses, viz. audit fee, rent, legal fees etc.), Return on Capital Employed and depreciation. Further, as per Regulation 4.14 of the MYT Regulations, 2007, adjustment to depreciation and return on capital employed for actual capital investment vis-a-vis approved capital investment shall be done at the end of the Control Period.

3.98 As per Regulation 4.16(b), for controllable parameters, any surplus or deficit on account of O&M expenses shall be to the account of the Licensee and shall not be trued up in the ARR; and, depreciation and RoCE shall be trued up at the end of the Control Period.

3.99 The Commission has reviewed the Controllable components in the subsequent paragraphs based on inter alia the above Regulations.

Employee Expenses

Petitioner's Submission

3.100 The Petitioner has, besides submitting employee expenses as approved by the Commission in Tariff Order dated August 26, 2011, also submitted additional employee expenses on account of increase in consumer base and the SVRS Pension payout amount being different from that approved by the Commission in its MYT Order as given below:

Table 14: Revised Employee Expenses (Rs Cr)

Particulars	Approved in MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission
Employee Cost (excluding 6th Pay Commission)		156.88	156.88
Increase in Salaries in FY 2010-11	162.54	36.90	36.90
Total Employee Cost Revised		193.78	193.78
Less: Employee Expenses Capitalised	16.08	19.06	19.06
Total Employee Expenses	146.46	174.72	174.72
Additional Employee Cost on account of increase in consumer base (50% of the increase in consumer base, 19.22% of the employee expense)			33.57
Add: SVRS Pension	6.06	6.06	8.10
Total	**152.52**	**180.78**	**216.39**

Commission's Analysis

3.101 The Hon'ble Apellate Tribunal of Electricity (ATE) in its judgement dated September 6, 2009 in appeal no 36 of 2008, while concluding that the employee expenses shall be trued up to the extent of increase caused by increase in consumer base, also cautioned the Commission as well as appellant to ensure that SVRS eventually lead to cost saving and further that such cost saving is passed on to the consumers. This caution was given on the much strength of the contention of the consumers that the purpose behind any SVRS scheme is to rationalise employee expenses and so the expenditure on account of SVRS should not be more than eventual cost saving by reducing the number of employees and also that the expenditure on the SVRS should be tariff neutral.

3.102 With reference to the issue of additional employee expenses submitted by the Petitioner due to increase in consumer base, the Commission during Policy Direction Period had allowed the Petitioner an expenditure of Rs 106.07 Cr on account of Special Voluntary Retirement Scheme (SVRS) offered by the Petitioner as the Petitioner has submitted that it has surplus employees. Now, if the Commission allows any increase in employee base on account of increase in consumer base, it will defy the logic of offering SVRS to DVB employees and will charge consumers of the Petitioner twice, once for amount paid by the Petitioner on account of SVRS and later on account of hiring of new employees, thereby causing a higher recurring burden on the consumer by way of Pension Medical etc. Of the pensioners and higher salaries to the new recruits. Since this will also not be in accordance with the intent and spirit of the Hon'ble ATE's judgement, the Commission rejects the prayer of the Petitioner to approve increase in employee expense on normative basis on account of increase in consumer base.

3.103 In the MYT Order, the Commission has stated following for SVRS pension *"the Commission now allows the monthly pension provisionally subject to the outcome of the Tribunal Order with the condition that any refund/relief provided on this account to the Petitioner by the Trust will be available for adjustment in the future employee expenses*"

3.104 As the final Order on the pension liability is not out yet, the Commission has approved the SVRS pension at the level approved in MYT Order. The Commission will review the expenditure under SVRS pension, while truing up for the first MYT Control Period.

3.105 The Commission approves the employee expenses for FY 2010-11 as shown in the table below.

Table 15: Employee Expenses approved by the Commission for FY 2010-11 (Rs. Cr)

Particulars	Approved in MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission	Now Approved
Employee Cost (excluding 6th Pay Commission)	162.54	156.88	156.88	156.88
Increase in Salaries in FY 2010-11		36.90	36.90	36.90
Total Employee Cost Revised		193.78	193.78	193.78
Less: Employee Expenses Capitalised	16.08	19.06	19.06	19.06
Total Employee Expenses	146.46	174.72	174.72	174.72
Additional Employee Cost on account of increase in consumer base (50% of the increase in consumer base, 19.22% of the employee expense)			33.57	-
Add: SVRS Pension	6.06	6.06	8.10	6.06
Total	**152.52**	**180.78**	**216.39**	**180.78**

Administration & General (A&G) Expenses

Petitioner's Submission

3.106 The Petitioner has submitted A&G expenses of Rs 35.63 Cr for FY 2010-11 as approved by the Commission Tariff Order dated August 26, 2011.

Table 16: A&G Expenses proposed for FY 2010-11 (Rs. Cr)

Particulars	Approved in the MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission
A&G Expenses	34.94	35.63	35.63

Commission's Analysis

3.107 In terms of Regulation 4.16 (a) (i) of the MYT Regulations 2007, the Commission approves the A&G Expenses for FY 2010-11 as approved in Tariff Order dated August 26, 2011 as shown in the table below:

Table 17: A&G Expenses approved for FY 2010-11 (Rs. Cr)

Particulars	Approved in the MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission	Now Approved
A&G Expenses	34.94	35.63	35.63	35.63

Repairs & Maintenance (R&M) Expenses

Petitioner's Submission

3.108 The Petitioner has submitted R&M expenses of the same amount as approved in the MYT Order, viz. 89.80 Cr.

Table 18: R&M expenses proposed for FY 2010-11 (Rs. Cr)

Particulars	Approved in the MYT Order	Petitioner's Submission
R&M Expenses	89.80	89.80

Commission's Analysis

3.109 In terms of Regulation 4.16 (a) (i) of the MYT Regulations 2007, R&M expenses are approved at the same level as provided in the MYT Order for FY 2010-11 as shown below:

Table 19: R&M Expenses Approved by Commission for FY 2010-11 (Rs. Cr)

Particulars	Approved in the MYT Order	Petitioner's Submission	Now Approved
R&M Expenses	89.80	89.80	89.80

Operation & Maintenance Expense

Petitioner's Submission

3.110 Operation & Maintenance (O&M) Expense is the sum total of expenses incurred towards employee, A&G and R&M expenses. After considering expense capitalization of Rs. 19.06 Cr in the employee expenses and efficiency factor at 4%, the Petitioner has claimed net O&M expenses of Rs 296.25 Cr. In addition to this, the Petitioner has claimed Rs 33.57 Cr of additional normative employee expenses on account of increase in consumer base.

Commission's Analysis

3.111 The O&M Expenses approved by the Commission is shown below:

Table 20: Amount approved by the Commission (Rs. Cr)

Particulars	Approved in the MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission	Now Approved
Employee Expenses (Net of capitalisation)	146.46	174.72	174.72	174.72
Additional Employee Cost on account of increase in consumer base (50% of the increase in consumer base, 19.22% of the employee expense)			33.57	-
SVRS Pension	6.06	6.06	8.10	6.06
A&G Expenses	34.94	35.63	35.63	35.63
R&M Expenses	89.80	89.80	89.80	89.80
Gross O&M Expenses	277.26	306.21	341.82	306.21
Efficiency improvement	4%	4%	4%	4%
Net O&M Expenses	**266.17**	**293.96**	**329.82***	**294.20#**

**No efficiency factor on SVRS Pension and increase in consumer base was considered*

 # No efficiency factor on SVRS pension is considered as per the Commission's submission in the ATE

Review of Capital Expenditure & Capitalisation

Capital Expenditure Review

3.112 Regulation 4.14 of MYT Regulations, 2007 stipulates as under:

"The Commission shall review the actual capital investment at the end of each year of the Control Period. Adjustment to depreciation and return on capital employed for the actual capital investment vis-à-vis approved capital investment shall be done at the end of Control Period". (Emphasis supplied)

3.113 Capital expenditure (Capex) proposed by the Petitioner in its Business Plan was Rs. 850 Cr as under:

Table 21: Capex proposed by TPDDL (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	Total
CAPEX	333	188	169	160	850

3.114 However in the MYT Petition it was increased to Rs. 950 Cr by the Petitioner:

Table 22: Revised capex proposed by TPDDL (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	Total
CAPEX	325	225	200	200	950

3.115 As per the Petitioner's submission, the capital expenditure claimed to have been incurred in FY 2010-11 is Rs. 465 Cr.

3.116 The Commission is of the opinion that instead of capital expenditure incurred, the actual capitalisation figures are more important since they have more relevance in terms of the assets actually having been put to use.

3.117 The Commission emphasizes that capital expenditure and capitalization would need to be seen separately. The capital expenditure has to be reviewed with respect to schemes proposed by the distribution licensees, approval by the Commission and actual expenditure against approved schemes (along with the opening and closing levels of CWIP). This would indicate the progress in implementation of approved schemes. The year wise capitalisation has to be compared to the capitalisation approved in the MYT Order for the impact in the fixed cost in Tariff.

3.118 TPDDL has claimed following capitalization for the MYT period so far:

Table 23: Capitalisation claimed by TPDDL (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Approved in MYT Order	520.00	400.00	225.00	200.00
Actual as per DISCOM	264.46	337.2	375	390

3.119 The Commission emphasizes that as per the MYT Regulations, any shortfall in Capital Expenditure with respect to the figures considered in the MYT Order shall be considered at the end of the MYT Control Period. Necessary adjustment to various parameters relating to capital expenditure at the end of the Control Period will be done along with carrying cost.

Review of Depreciation

Petitioner's Submission

3.120 The Petitioner has submitted depreciation of the same amount as approved in the Tariff Order dated August 26, 2011, viz. 110.28 Cr.

Table 24: Depreciation submitted by Petitioner for FY 2010-11 (Rs. Cr)

Particulars	Approved in the MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission
Depreciation	124.02	110.28	110.28

Commission's Analysis

3.121 The Commission had approved an amount of Rs. 124.02 Cr for FY 2010-11 in the MYT Order. The Commission in Tariff Order dated August 26, 2011 had approved revised depreciation for each year of the Control Period after correcting mistakes in the MYT Order. The revised depreciation amount for FY 2010-11 was Rs 110.28 Cr.

3.122 As per MYT Regulations, 2007, Depreciation is a controllable parameter, for which the Commission has set targets for each year of the Control Period. Further, adjustment to depreciation for the actual investment vis-à-vis approved capital investment shall be done at the end of the Control Period. The Commission approves Rs 110.28 Cr towards depreciation for FY 2010-11 as shown below:

Table 25: Approved Depreciation for FY 2010-11 (Rs. Cr)

Particulars	Approved in the MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission	Now Approved
Depreciation	124.02	110.28	110.28	110.28

Review of Return on Capital Employed (RoCE)

Petitioner's Submission

3.123 The Petitioner has submitted RoCE including supply margin as Rs. 242.06 Cr for FY 2010-11 subject to correction of average Debt for repayment of debt while working the WACC.

Table 26: RoCE submitted by Petitioner for FY 2010-11 (Rs. Cr)

Particulars	Approved in the MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission
RoCE	234.56	229.01	229.01
Supply Margin	16.08	13.05	13.05
RoCE with Supply Margin	**250.64**	**242.06**	**242.06**

Commission's Analysis

3.124 The Commission had approved Rs. 250.64 Cr towards Return on Capital Employed and Supply Margin in the MYT Order for the FY 2010-11. The Commission Tariff Order dated August 26, 2011 had approved revised RRB for each year of the Control Period after correcting mistakes in the MYT Order. The Commission also revised WACC and RoCE for each year of the Control Period in the same Order. The revised RoCE amount for FY 2010-11 was Rs 242.06 Cr.

3.125 As per MYT Regulations, 2007, RoCE is a controllable parameter, for which the Commission has set targets for each year of the Control Period. Further, adjustment to RoCE for the actual investment vis-à-vis approved capital investment shall be done at the end of the Control Period. The Commission approves Rs 242.06 Cr towards RoCE for FY 2010-11 as shown below:

Table 27: Now Approved RoCE for FY 2010-11 (Rs. Cr)

Particulars	Approved in the MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission	Now Approved
RoCE	234.56	229.01	229.01	229.01
Supply Margin	16.08	13.05	13.05	13.05
RoCE with Supply Margin	**250.64**	**242.06**	**242.06**	**242.06**

Carrying Cost

3.126 The Commission during the validation session with the Petitioner inquired about the details of the loan taken by the Petitioner for funding of the gap. The officials of the Petitioners informed the Commission that it will not be possible for them to identify the loans taken specifically for funding of revenue gap. Whatever loan Petitioner has taken in any year, part of it was utilised towards capital expenditure and part of it towards funding of the revenue gap.

3.127 The Commission directed the Petitioner to submit the year-wise average interest rate incurred by the Petitioner for FY 2010-11.

3.128 The Petitioner in its letter dated June 13, 2012 has submitted the loan details of loan taken for working capital and funding of uncovered gap.

3.129 The Commission has calculated weighted average interest rate for loan taken for funding of uncovered gap from the loan details submitted by the Petitioner, which is considered as interest rate applicable for funding of uncovered gap, as shown below:

Table 28: Interest Rate considered for Carrying Cost

Particulars	FY 2010-11
Weighted Average Interest Rate considered for Carrying Cost	8.87%

Consumers' Security Deposits

3.130 The Petitioner has submitted that the Commission may consider adjusting the difference between the interest rate allowed by the Hon'ble Commission on working capital and the rate of interest paid on consumer security deposit which comes to 3.50% p.a. (i.e. 9.50 % considered for carrying cost - 6.00%) for the purpose of ARR .The details of the Consumer security deposit for FY 2010-11 as shown in the audited accounts of the Petitioner is shown below:

Table 29: Consumer Security Deposit for FY 2010-11 (Rs. Cr)

Particulars	FY 2010-11
Opening Consumer Security Deposit	239.72
Closing Consumer Security Deposit	280.54
Average Consumer Security Deposit	**260.13**
Difference between interest on working capital and interest rate on consumer security deposit @ 3.50% (9.50% - 6%)	9.10

3.131 As per the Regulation 5.24 of the MYT Regulations, 2007 -

5.24 Interest on security deposits, in excess of the rate specified by the Commission in the "Delhi Electricity Supply Code and Performance Standards Regulations, 2007" shall be considered as Non Tariff income of the Licensees.

3.132 The Petitioner through its letter dated June 3, 2012 has submitted that expenses incurred on account of interest on consumer security deposit is Rs 16.40 Cr which includes provision of Rs 1.20 Cr and Rs 1.92 Cr towards interest on consumer security deposit paid for pre privatization period received by DVB which is yet to be transferred to the Petitioner. The Commission in its Order dated April 23, 2007 has already decided that this amount is to be paid by DPCL and therefore cannot be allowed.

3.133 As the Petitioner has invested the consumers' security deposits in the business, the Commission is treating the same as funding the working capital and revenue gap for the Petitioner. The Commission has allowed interest on working capital @ 9.5% and carrying cost @ 8.87% for FY 2010-11 for the Petitioner therefore the Commission has assumed consumer security deposit earning @ 8.87% during FY 2010-11. The normative income on consumer security deposit calculated by the Commission is shown below:

Table 30: Interest on Consumer Security Deposit (Rs. Cr)

Particulars	FY 2010-11
Interest on Consumer Security Deposit actually paid	13.28
Average Consumer Security Deposit	260.13
Normative Interest on Consumer Security Deposit @ 8.87%	23.07
Difference Considered towards Non Tariff Income	**9.79**

3.134 The Commission has included the difference between normative income earned on consumer security deposit and interest paid to consumers on their consumer security deposit as Non tariff Income as per the MYT Regulations, 2007.

Income Tax

Petitioner's Submission

3.135 The Petitioner has submitted that it incurred Rs. 61.84 Cr in FY 2010-11 on income taxes, while it was allowed only Rs. 15 Cr in the MYT Order.

Table 31: Income tax expense claimed by the Petitioner

Particulars (Rs. Cr)	Approved in MYT Order	Petitioner's Submission
Income tax	15.0	61.84

Commission's Analysis

3.136 As per the MYT Regulations,

"5.22 Tax on income, if any, liable to be paid shall be limited to tax on return on the equity component of capital employed. However any tax liability on incentives due to improved performance shall not be considered."

3.137 The Commission directed the Petitioner to submit the copy of Income Tax return filed by the Petitioner, which was duly complied with the Petitioner in its letter dated February 29, 2012. The Commission observes as per the Income Tax Return filed by the Petitioner for FY 2010 -11 (Assessment Year FY 2011-12), the total income tax liability was Rs 61.10 Cr, which included Rs 0.53 Cr on account of delayed payment interest that the Petitioner has filed. The Commission approves the amount of Rs. 60.57 Cr towards Income Tax after deducting the penal interest. The Petitioner also informed the Commission that it has received a refund of Rs 1.05 Cr of the income tax deposited in FY 2009-10 during FY 2010-11. As the Commission had allowed entire Income Tax paid by the Petitioner while truing up for FY 2009-10, the Commission has subtracted Rs 1.05 Cr from the Income Tax approved for FY 2010-11. The Commission will do a final true up for the Income Tax expenses for each year of the Control Period after truing up the RoCE and final income tax liability can be determined once return on equity component of the capital employed is determined.

Table 32: Income tax expense approved

Particulars (Rs. Cr)	Approved in MYT Order	Petitioner's Submission	Now Approved
Income tax	15.0	61.84	59.52

Other Expenses

Petitioner's Submission

3.138 TPDDL has submitted the following additional expenses for consideration in ARR computation:

(a) **CISF / Security Expenses:** Due to additional deployment of CISF forces as well as the impact of the Sixth Pay Commission, it incurred Rs. 0.67 Cr as expenditure on CISF forces. On withdrawal of CISF in June 2009, TPDDL has partly replaced CISF Personnel by other security personnel during FY 09-10 and has incurred Rs. 0.55 Crs on account of same. Further during FY 10-11, TPDDL has some past bills of CISF amounting to RS 0.12 Cr also. The additional amount spent on replacement of CISF personnel together with the amount spent on CISF personnel (past bills) for FY 2010-11 is Rs. 0.67 Cr.

(b) **Trading fees:** An expense of Rs 0.07 Cr has been incurred towards membership fee of the Indian Energy Exchange, Power Exchange.

(c) **Credit Rating**: An amount of Rs 0.21 Cr has been incurred in 2010-11 towards the credit rating of its fund and non-fund based facilities.

(d) **Expenses on account of energy conservation**: An amount of Rs 0.10 Cr incurred during the FY 2010-11 on Demand Side Management activities.

(e) **Litigation expenses for DPCL period**: As per the transfer scheme any expenses incurred in respect of litigation pertaining to the period of before July 2002, the liability of DISCOMs was limited to Rs 1 Cr. During the FY 2010-10, TPDDL has incurred an amount of Rs 0.10 Cr on this account. The amount incurred for the same in FY 2006-07 (base year) was Rs 0.06 Cr. After adjusting the same for annual inflation allowed and efficiency factor applied by the Commission in the MYT Order, the amount approved for FY 2010-11 was Rs. 0.07 Cr

(f) **Cost of auditor's certificate:** During the year FY 2010-11, the Commission has directed to get the veracity of certain figures, information like power purchase cost, billing data etc. be certified from the Auditor of the company. TPDDL has incurred an amount of Rs 0.03 Cr towards the same

(g) **License Fees on energy bill:** As per clause 12.1, of the Distribution and Retail Supply License, TPDDL is required to pay annually 0.05% of amount billed of previous year as license fees to the Commission. Since the same is linked to sales which is uncontrollable and is trued up, the license fee too needs to be trued up. TPDDL has claimed Rs 0.40 Cr on this account for FY 2010-11.

(h) **Tender cost for procurement of material**: The Commission has issued the Competitive Bidding Guidelines during the FY 2010-11 which provided for procurement of any materials/services of an amount exceeding Rs 0.25 Cr through open tendering. The limit of Rs 0.25 Cr was subsequently increased to Rs 1 Cr vide revised guidelines issued by the Commission in FY 2009-10. This additional expense has been necessitated due to the Order of the Commission, TPDDL be allowed an amount of Rs 0.21 Cr which has been incurred towards advertisement for Open Tendering during the FY 2010-11.

(i) **Food Allowance**: DTL vide its circular allowed Food allowance of Rs 500 per employee per month w.e.f 01.04.10 which is simultaneously implemented in TPDDL as well. TPDDL has paid Rs 1.38 Cr as Tea/Food Allowance to employees under FRSR Structure in FY 2010-11. TPDDL was paying Rs 125 employee p.m as tea allowance. As TPDDL was already paying Rs 125 employee p.m. hence TPDDL has now increased the same to Rs 500 employee p.m. based on above circular. TPDDL has paid Rs 0.39 Cr in FY 2006-07; hence additional impact of Rs 0.91 Cr needs to be allowed in FY 2010-11

(j) **Children Education Allowance**: Govt. of India vide its notification dated September 2, 2008 has increased the children education allowance per child (for two children) to Rs 1000 pm per child from the prevailing rate of Rs 40 per child. TPDDL has implemented the same in FY 2010-11. TPDDL has incurred Rs 2.25 Cr during FY 2010-11 on account of increase in Children Education Allowance over and above the amount paid in base year i.e. FY 2006-07.

(k) **Legal Expense**: TPDDL has incurred an amount of Rs 1 Cr towards legal expenses on PIL by Sh. N K Garg, where TPDDL was also a party.

(l) **Power Banking**: The Petitioner has submitted that the net impact of cumulative carrying cost for power banking for FY 2010-11 works out to Rs 0.39 Cr.

3.139 The costs stated above are summarised below:

Table 33: Additional expenses claimed for FY 2010-11 (Rs Cr)

Other Expenses	FY 2010-11 Petitioner's Submission
CISF/Security Expenses	0.67
Trading of Power	0.07
Credit Rating	0.21
Energy Conservation	0.10
Litigation Expense DPCL Period	0.03
Cost of Auditor Certificates	0.03
License Fees on Energy Billed	0.40
Food Allowance	0.91
Tender Cost	0.21
Children Education Allowance	2.25
Legal Expenses	1.0
Total	**5.88**

Commission's Analysis

3.140 In the MYT Order, the Commission had not made any provision for additional expenses apart from the expenses considered and approved in the Order.

3.141 With respect to CISF / Security expenditure, the Commission observes that the deployment of CISF / Security force has helped in reduction of AT&C losses. Therefore, any cost on account of CISF / Security forces should be first adjusted towards the benefit on account of overachievement in reduction of AT&C losses, if any, before passing on any benefit to consumer or the distribution licensee. However, the Commission has not approved AT&C loss for FY 2010-11 and hence there is no incentive approved for overachievement for the petitioner for FY 2010-11.Therefore, the Commission has approved CISF expenditure of Rs 0.67 Cr as a part of expenses on new initiative.

3.142 The Commission allows additional expenses on account of expenses related to fee for power exchange and cost of auditor's certificate to the extent requested in the this petition as the Petitioner has incurred these expenses for the first time during the MYT Control Period and hence these were not included in the O&M Expenses for the base year while preparing the MYT Order.

3.143 With reference to the expenses on obtaining a credit rating, the Commission observed that the credit rating expenses approved by the Commission while truing up for FY 2008-09 and FY 2009-10 was Rs 0.11 Cr and directed the Petitioner to submit details of the expenses for obtaining credit rating. The Petitioner informed the Commission that it had incurred 0.11 Cr, 0.07 Cr and 0.21 Cr in FY 2008-09, FY 2009-10 and FY 2010-11 respectively. The Commission notices that it had allowed higher expenses towards credit rating expenses by Rs 0.04 Cr in FY 2009-10. The Commission therefore, while approving credit rating expenses for FY 2010-11 has deducted the higher amount along with carrying cost, and approves 0.16 Cr towards credit rating expenses.

3.144 With reference to the expenses on additional license fee paid by the Petitioner, the Commission observes that it had approved Rs 0.37 Cr as additional license fee to the Petitioner for FY 2007-08, FY 2008-09 and FY 2009-10 while truing up for FY 2009-10 in Tariff Order dated August 26, 2011. The Commission observes that total additional license fee paid by the Petitioner as 0.05% of the energy billed (over and above approved by the Commission under A&G Expenses) till FY 2010-11 was Rs 0.61 Cr. Since the Commission has already approved Rs 0.37 Cr till FY 2009-10, it is approving Rs 0.24 Cr towards additional license fee to the Petition for FY 2010-11. However, for all previous years, the Commission shall true up the license fees paid by the Petitioner to DERC vis-à-vis normative license fees payable for each year @ 0.05% of revenue billed during the previous year, after the end of this Control Period.

3.145 With respect to expenditure claimed by the Petitioner on account of increase in Children Education Allowance, the Commission has already considered increase in Children Education Allowance while revising employee expenses for the Petitioner in its tariff Order dated August 26, 2011

3.121 Further, the Commission has also observed that while the increase in salaries due to wage revision was with retrospective effect from January 1, 2006, the implementation of wage revision recommendations also led to introduction/removal/increase of certain allowances such as HRA, TPA, CCA, LTC Encashment and ***Children Education Allowance*** *with effect from FY 2008-09. The impact on employee cost on account of these 'New Allowances' has been added separately from FY 2008-09 onwards. As these allowances were started / discontinued in FY 2008-09 and were not applicable for the entire year of FY 2008-09, the Commission has considered the impact on employee cost on account of these allowances in FY 2009-10 as base year, when these allowances were applicable for full year and escalated the total allowances paid in FY 2009-10 by the escalation factor to arrive at the figure for FY 2010-11"*

3.146 The Commission, therefore, rejects the claim of Petitioner on account of increase in Children Education Allowance.

3.147 With respect to expenditure claimed by the Petitioner on account of increase in Food Allowance, the Commission is of the Opinion that Food Allowance was part of the base Employee Expenses of the Petitioner for FY 2006-07. The Food Allowance was fixed at Rs 125 pm and there was no increase during FY 2007-08 – FY 2009-10. The expenses incurred by the Petitioner on account of Food Allowance and Children Education Allowance during FY 2007-08 – FY 2009-10 would be lower than the amount approved by the Commission due to

(a) the Commission has considered an indexation factor and increased the base year amount every year

(b) Number of DVB employees getting reduced due to retirement

3.148 No such reduction in expenses on account of the same was proposed by the Petitioner during the previous years. The Petitioner has now submitted claim on account expenses incurred by it due to higher Food Allowance in FY 2010-11. The Commission rejects the Petitioner's claim as Food Allowance was part of the base year value of the Employee Expenses.

3.149 With respect to the financing cost of power banking, the Commission believes that banking contracts are revenue neutral. The electricity industry follows a practice wherein in case of forward/ advance banking, the utility demands additional power @ 4% to be returned and in case of backward banking, the utility has to return 4% extra power. The Commission considers the power banked in advance by the utility as energy sale at Rs 4 per unit because if it does not consider it then it would be burdening present consumers for future consumption, which the Commission deems inappropriate. The utility will be receiving the power banked along with 4% additional power in the next year. The Commission considers total power received as power purchase @ Rs 4 per unit. This allows the utility power purchase cost on additional 4% power received by them @ Rs 4 per unit, which is equivalent to the financing cost of this banking.

3.150 The Commission has already rejected the Petitioner's contention while truing up for previous years.

3.151 With reference to expenses towards energy conservation activities, the Commission observes that the Petitioner has not taken approval from the Commission before executing the scheme. Moreover, under the scheme, Petitioner has procured LED bulbs for own office, which will help in reducing its own energy consumption, which will benefit the TPDDL. Hence, the Commission has not allowed the expenses towards energy conservation.

3.152 With reference to litigation expenses for DPCL period, it was part of A&G expenses approved by the Commission, which is a controllable parameter. Mere fact that the Petitioner had incurred Rs 0.10 Cr on litigation expenses, does not qualify the Petitioner for additional amount from the Commission in the ARR. In case the actual litigation expenses for DPCL period were less than Commission approved values, the Petitioner would not have returned the same back to the consumers through reduction in ARR. Therefore, the Commission has rejected the Petitioner's request and not allowed any additional amount towards this.

3.153 The Commission also rejects Petitioner's claim towards legal expenses as legal expenses are part of A&G Expenses and A&G Expenses is Controllable Expense.

3.154 The Commission rejects the Petitioner's claim of tendering cost of Rs 0.21 Cr for procurement of material through open tender as the Petitioner was always required to procuring material through tenders. Any cost incurred by the Petitioner during the Policy Direction Period on account of tenders must be part of the A&G expense of the Petitioner. This is not a new initiative and cannot be allowed in the ARR.

3.155 The Commission allows the Petitioner Rs 0.12 Cr (80% of Rs 0.15 Cr) as expenses incurred on DVB arrears.

3.156 The total amount approved by the Commission under the head 'Other Expenses' is shown below:

Table 34: Other expenses approved by Commission for FY 2010-11 (Rs Cr)

Other Expenses	FY 2010-11		
	Approved in the MYT Order	Petitioner's Submission	Now Approved
CISF/Security Expenses		0.67	0.67
Trading of Power		0.07	0.07
Credit Rating		0.21	0.16
Energy Conservation		0.10	0.00
Litigation Expense DPCL Period		0.03	
Cost of Auditor Certificates		0.03	0.03
License Fees on Energy Billed		0.40	0.24
Food Allowance		0.91	
Tender Cost		0.21	
Children Education Allowance		2.25	
Legal Expenses		1.0	
DVB Arrears			0.12
Total	**0.00**	**5.88**	**1.29**

Non Tariff Income (NTI)

Petitioner's Submission

3.157 The Petitioner has submitted Non Tariff Income of Rs. 90.41 Cr for FY 2010-11, while the amount approved in the MYT Order was Rs. 29.86 Cr. The details of Non Tariff Income submitted by the Petitioner is shown below:

Table 35: Non Tariff Income for FY 2010-11 (Rs Cr)

Particulars	Petitioner's Submission
Non Tariff Income as per audited accounts	134.82
Less:	
Rebate over and above 1%	*2.41*
Transfer from capital grants	*0.38*
Transfer from consumer contribution for capital works	*12.01*
Provision for doubtful debts / advances	*16.18*
Interest/Short term capital gain	*1.58*
Service Line Charges to be deferred in future years	*3.77*
Income from Other Business	*0.82*
Financing Cost of LPSC	*10.64*
Incentive on Street Light Maintenance charges	*1.61*
Material Component of Street Light Maintenance Charges	*3.36*
Service tax on Street light maintenance charges not reimbursed by MCD/PWD	*0.75*
Add: *Interest on consumer security deposit*	*9.10*
Total Non Tariff Income	**90.41**

Commission's Analysis

3.158 Regulation 5.25 of the MYT Regulations, 2007 states that *"The amount received by the licensee on account of Non Tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such licensee"*. Clause 5.27 further elaborates that *"The net aggregate revenue requirement of the licensee eligible for recovery during each year of the Control Period shall be determined after deducting from the aggregate revenue requirement, the non tariff income and the other income"*. A joint reading of both the above clauses indicates that NTI being an integral part of the revenue requirement shall be trued up at the end of each year of the Control Period.

3.159 As per the MYT Regulations only two sets of parameters are recognized i.e. controllable and uncontrollable. While the uncontrollable parameters include revenue / expenditure on account of sales and power purchase and provide for its annual true up, the controllable parameters include O&M expense, Capex related expenses and RoCE, and does not specifically include Non Tariff Income. Also, the MYT Regulations in regard to controllable expenses specifically provide for true up of Capex related expenditure i.e. RoCE and Depreciation at the end of the Control Period.

3.160 The Petitioner has shown earnings of Rs 2.00 Cr from other than License Business which includes Rs 1.13 Cr from Consultancy, Rs 0.61 Cr from utilization of TPDDL's assets and Rs 0.26 Cr through Training. It has proposed to share earnings from utilisation asset in 80:20 ratio, 50:50 in case of Training, Consultancy of net Income.

The Petitioner has proposed to share 0.82 Cr with the consumers against the total earnings of Rs 2.00 Cr, and subtracted Rs 1.18 Cr from the non tariff income.

3.161 The Commission through its letter dated July 26, 2011 directed the Petitioner to submit proof that it has deployed additional man power and not used the man power of TPDDL. However, no such proof was provided by the TPDDL. The Commission find it very difficult to believe that TPDDL's man power in not being used for the consultancy. If that is the case, let the Petitioner float a separate subsidiary for consultancy services, to bring in transparency / clarity in the operations of the Petitioner. In the present set up, the Commission is not accepting the TPDDL's submission that it is not using man power of the TPDDL for consultancy business and hence considered income from consultancy business as other business.

3.162 As per the Delhi Electricity Regulatory Commission (Treatment of Income from Other Business of Transmission and Distribution Licnesee) Regulation, 2005, 80% of the revenue arising out of the other business of the licensee shall be passed on to the regulated business of the licensee.

3.163 The Commission has, accordingly, considered 80% of the income from other business i.e. Rs 1.60 Cr as the non tariff income and subtracted Rs 0.40 Cr from total non tariff income submitted by the Petitioner on this account.

3.164 The Petitioner has subtracted Rs 0.75 Cr from non tariff income on account of Service Tax paid by the Petitioner towards income on account of Street Light Maintenance Charges from MCD which has not been reimbursed by MCD/PWD.

3.165 The Commission is of the opinion that the Petitioner should charge the service tax on Service Light Maintenance Charges to MCD/PWD and not claim this from the ARR. The Commission rejects Petitioner's stand and has not subtracted Rs 0.75 Cr from non tariff income.

3.166 The Petitioner has submitted that it has claimed total rebate of Rs 23.45 Cr, of which Rs 21.04 Cr was up to 1% rebate earned on timely payment of power purchase bills. TPDDL, through its email dated May 31, 2012 submitted that Rs 20.05 Cr was up to 1% rebate. It has also submitted that it has allowed a rebate of 0.41 Cr on sale of power on timely payment power purchase bill by the purchaser.

3.167 The Commission has considered entire rebate of Rs 23.45 Cr available towards Non Tariff Income.

3.168 The Petitioner had collected Late Payment Surcharge (LPSC) of Rs 17.44 Cr in FY 2010-11 from its Consumers. As the Petitioner charges LPSC @ 18% per annum (1.5% per month), the principle amount on which LPSC has been charged will be Rs 96.89 Cr.

3.169 The Commission in its MYT Order dated Feb 23, 2008 had approved funding of working capital @ 9.5% considering SBI PLR of 12.25% prevalent at the time of issuing MYT Order. As prevailing SBI PLR as on April 1, 2010 was 12.25%, the

Commission has allowed the financing cost for LPSC @ 9.5%. The financing cost approved by the Commission is shown below:

Table 36: Funding of LPSC (Rs Cr)

Particular	FY 2010-11
LPSC Collected (@ 18%)	17.44
Principle amount on which LPSC was charged	96.89
Interest Rate for funding of Principle of LPSC	9.5%
Interest approved on funding of Principle amount of LPSC	9.20

3.170 TPDDL in its Petition has submitted to the Commission that it has inadvertently shared higher income on account of maintenance of street lights during FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11, as the Petitioner is entitled to earn incentive from the income from maintenance of the street lights in accordance with the Commission's Order, if it is able to achieve certain performance standard. However, the Petitioner had not provided detailed working/supporting documents for the claim. The Commission's Order on incentive/ penalty on street light maintenance is applicable from FY 2005-06. The Commission directed the Petitioner to provide details of its claim along with the supporting documents along with its performance from FY 2005-06 onwards. However the Petitioner has not provided details from FY 2005-06 onwards. The Commission will take up this matter separately as and when information is made available by the Petitioner.

3.171 Hence, the Commission has approved the amount of Non Tariff Income as summarised below:

Table 37: Trued-up Non Tariff Income approved by Commission (Rs. Cr)

Particulars	Petitioner's Submission
Non Tariff Income as per audited accounts	134.82
Less:	
Transfer from capital grants	*0.38*
Transfer from consumer contribution for capital works	*12.01*
Provision for doubtful debts / advances	*16.18*
Interest/Short term capital gain	*1.58*
Service Line Charges to be deferred in future years	*3.77*
Income from Other Business	*0.40*
Financing Cost of LPSC	*9.20*
Material Component of Street Light Maintenance Charges	*3.36*
Add:	
Interest on Consumer Security Deposit	*9.79*
Total Non Tariff Income	**97.73**

Annual Revenue Requirement for FY 2010-11

3.172 The ARR approved in the MYT Order, Tariff Order dated August 26, 2011, as claimed by the Petitioner and the trued up ARR is summarised below:

Table 38: Aggregate Revenue Requirement for FY 2010-11 (Rs Cr)

Aggregate Revenue Requirement	FY 2010-11			
	Approved in MYT Order	Approved in TO dated Aug 26, 2011	Petitioner's Submission	Now Approved
Power purchase cost	2094.07	2094.07	3122.88	3069.47
O&M expenses	266.17	293.96	329.82	294.20
Depreciation	124.02	110.28	110.28	110.28
RoCE including supply margin allowed	250.64	242.06	242.06	242.06
Income Tax expenses	15.00	15.00	61.84	59.52
Other Expenses	0.00	0.00	5.88	1.29
Less:				
Other income including Non Tariff Income	30.63	30.63	90.41	97.73
Interest/other expenses capitalized	5.15	5.15	-	-
Aggregate Revenue Requirement	**2714.12**	**2724.75**	**3771.98**	**3679.09**

Revenue available towards ARR

Petitioner's Submission

3.173 The Petitioner has submitted the net revenue from sale of power to be considered towards annual revenue requirement as Rs. 2703.92 Cr after adjustment towards electricity tax and the Petitioner's share of over-achievement incentive. The Petitioner has retained the consumers' share in the incentive on account of overachievement in AT&C loss reduction for meeting the revenue gap for FY 2010-11 as summarized below:

Table 39: Revenue Details submitted by the Petitioner

Particulars	Petitioner's Submission
Total Amount Realized	2946.46
Less: E Tax	126.51
Less: Benefit to be retained by the Petitioner	98.44
Less: DVB Arrears	0.15
Less: LPSC considered as part of Other Income	17.44
Revenue available for Expenses	**2703.92**

Commission's Analysis

3.174 The Commission has computed the total revenue of the Petitioner available towards ARR to be Rs 2801.93 Cr, as detailed below:

Table 40: Revenue available towards ARR approved by Commission for FY 2010-11

Particulars	Now Approved
Total Amount Realized (Less of Financing Cost)	2937.38
Less: Net LPSC Considered as Other Income	8.24
Less: Commission on DVB arrears	0.03
Less: E Tax	126.51
Revenue available for Expenses	**2802.60**

Contingency Reserve

3.175 As per the provisions of MYT Regulations, a Contingency Reserve is to be maintained for Tariff Stability and passing the benefits derived to the consumers under the MYT Framework. The Commission had in its MYT Order directed the Petitioner to transfer the amount allowed as contribution to the Contingency reserve in the past that is Rs. 20.37 Cr to the MYT Contingency Reserve. The Commission had also directed the Petitioner to maintain separate accounts in its books and reflect the balance in the MYT Contingency Reserve Account in the Balance Sheet. The Petitioner shall use the amount for investing in safe securities and earning returns based on the market conditions. However, the Petitioner is refrained from using the money for speculative purposes. The Commission also directed the Petitioner to transfer the refunds received from DTL, IP Station, Rajghat Power House, GTPS and PPCL as specified in the MYT Order of the respective Companies/ licenses to the Contingency Reserve.

3.176 The Commission in its True up Order for FY 2009-10, directed the Petitioner to utilise the Contingency Reserve for meeting the revenue gap. The closing contingency reserve was Rs 45.51 Cr during FY 2009-10. The Commission has considered the same available towards meeting revenue deficit and subtracted the same from opening revenue gap for FY 2010-11 approved by the Commission in this Order.

3.177 The Petitioner has offered the consumer share of the overachievement towards meeting the revenue gap for FY 2010-11. The Commission has not approved AT&C loss for FY 2010-11 and hence not approved any benefit to consumers on this account. Thus, there will be no addition to the contingency reserve during FY 2010-11.

Revenue (Gap)/ Surplus

3.178 The revenue (gap)/ surplus for FY 2010-11 as submitted by the Petitioner and trued up by the Commission is summarised below:

Table 41: Revenue (Gap)/ Surplus for FY 2010-11 (Rs Cr)

Particulars (Rs. Cr)	Petitioner's Submission	Now Approved
ARR for FY 2010-11	3771.98	3679.09
Revenue available towards ARR	2703.92	2802.60

Particulars (Rs. Cr)	Petitioner's Submission	Now Approved
Revenue (Gap)/ Surplus	(1068.06)	(876.49)

3.179 As shown above, the approved net revenue gap is Rs. 876.49 Cr for FY 2010-11 which would be adjusted in the determination of Aggregate Revenue Requirement for FY 2012-13. The treatment of this net revenue gap is dealt with in Chapter A5.

A4: ANALYSIS OF AGGREGATE REVENUE REQUIREMENT (ARR) FOR MYT CONTROL PERIOD (FY 2012-13 TO FY 2014-15)

Introduction

4.1 TPDDL has filed a Petition for determination of Aggregate Revenue Requirement for each year of the MYT Control Period (FY 2012-13 to FY 2014-15). The Commission has analysed the Petition submitted by the Petitioner for approval of Aggregate Revenue Requirement (ARR) for each year of the Control Period (FY 2012-13 – FY 2014-15) and determination of Wheeling and Retail Supply Tariffs for the FY 2012-13.

4.2 The Commission held several rounds of discussions to validate the data submitted by the Petitioner and sought further clarifications on various issues. The Commission has considered all information submitted by the Petitioner as part of the tariff petition, audited accounts for past years, responses to various queries raised during the discussions and also during the public hearing, for determination of tariff.

4.3 This Chapter contains detailed analysis of the Petition submitted by the Petitioner and the various parameters approved by the Commission for determination of ARR for the Petitioner for each year of the Control Period (FY 2012-13 to FY 2014-15).

Energy Sales

Petitioner’s Submission

4.4 The Petitioner has projected energy sales for FY 2011-12 based on the actual sales for the first six months of FY 2011-12 (i.e. up to September 2010). Based on the estimated sales for FY 2011-12, the Petitioner has projected sales for FY 2012-13 to FY 2014-15 using various Compound Annual Growth Rates (CAGR) observed in actual consumption by various consumer categories during the period FY 2006-07 to FY 2011-12.

4.5 However for categories like DMRC, agriculture, recovery from theft the Petitioner has used a nominal growth rate of 5% over sales of FY 2011-12 to project energy sales for FY 2012-13 to FY 2014-15.

4.6 The Petitioner has submitted an estimated energy sale of 6,665.01 MU in FY 2011-12. Later, the Petitioner submitted actual energy sales for the entire year of FY 2011-12, which is 6,701.97 MU.

4.7 The Petitioner’s proposed sales for various consumer categories in FY 2012-13 to FY 2014-15 is given below:

Table 42: Petitioner's Submission of Energy Sales for FY 2012-13 to FY 2014-15 (MU)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Domestic	3,105.39	3,384.87	3,689.51
Non-Domestic*	1,386.33	1,538.82	1,708.09
Industrial	2,100.60	2,226.63	2,360.23
Public Lighting	104.26	112.60	121.61
Irrigation & Agriculture	17.44	19.52	21.85
Railway Traction	67.85	72.26	76.96
DMRC	174.93	183.68	192.86
Others #	265.60	290.73	311.69
Total	**7,222.39**	**7,829.12**	**8,482.80**

** Excluding DJB; # Including DJB.*

4.8 In the "Others" category, the Petitioner has included sales under "own consumption" and "Enforcement", "Staff" and Hospitals/Worship places at 11 kV, and sales to DJB.

Commission's Analysis

4.9 The Commission is of the view that there are various factors which can have an effect on the actual consumption of electricity that are often beyond the control of the licensee, such as Government policy, economic climate, weather conditions, force-majeure events like natural disasters, etc. Hence, an attempt has been made to take into consideration various factors affecting electricity consumption and estimate the interrelationships among them to arrive at a reasonably accurate forecast of energy sales within a range for the purpose of estimating future costs/ revenues.

4.10 Accordingly, for projecting the category-wise energy sales of each Distribution Licensee for FY 2012-13 to FY 2014-15, the Commission has considered the past growth trends in each consumer category as explained below:

(a) The Commission has adopted an Adjusted Trend Analysis Method for projecting the sales/ connected load/ number of consumers of Domestic, Non Domestic, Industrial, Agriculture, Public Lighting and Other categories. This method assumes that the underlying factors which drive the demand for electricity are expected to follow the same trend as in the past. The Commission has however, discounted for any outlier (relative to the trend) observed in the growth rates over the period of 5 years and excluded them while projecting energy sales for FY 2012-13 to FY 2014-15.

(b) The strength of this method, when used with balanced judgment, lies in its ability to reflect recent changes and therefore makes it well suited as a basis for short-term projections in context of ARR determination.

(c) This method makes use of two statistical tools, namely the Compounded Annual Growth Rate (CAGR) and a simple average of the year-on–year growth rates (excluding the outliers), wherever appropriate. As per this method, Compounded Annual Growth Rates (CAGRs) were calculated from the past figures for each category, corresponding to different lengths of time in the past five years, along with the year on year growth rates since FY 2006-07. Pertinently, the CAGR is computed for each category for the past 5-year period FY 2006-07 to FY 2011-12, the 4-year period FY 2007-08 to FY 2011-12, the 3-year period FY 2008-09 to FY 2011-12, and the 2-year period FY 2009-10 to FY 2011-12, along with the 1-year growth rate of FY 2011-12 over FY 2010-11.

(d) Subject to the specific characteristics of each consumer category, either a particular CAGR or an average of the year-on–year growth rates is chosen as the basis of sales projection for that category. For example, if an abnormal growth rate (high or low), relative to the trend, is observed at the beginning of the five year period considered, then a shorter period is considered for the trend analysis and projections, i.e. appropriately a 3-year CAGR or a 4-year CAGR has been considered. However, if any outlier(s) is observed in the middle of this 5 year period, then a simple average of the year-on-year growth rates, excluding the outliers has been considered while making projections for FY 2012-13 to FY 2014-15.

(e) For making projections of sales and connected load/ number of consumers, the actual sales for FY 2011-12 for each consumer category, as submitted by the Petitioner, is taken as the base, i.e. the CAGR is applied over the actual sales for FY 2011-12 to make projections for each category for FY 2012-13; and for projections for FY 2013-14, the growth rate is applied on the projected sales of FY 2012-13, while for FY 2014-15, the projected sales for FY 2013-14 is considered the base.

(f) Further, for projection of number of consumers, sale and connected load of subcategories/ slabs of any consumer category, the Commission has used the ratio of actual sales in the subcategory to total sales of the category for the Petitioner observed in FY 2011-12. Although the Commission has not accepted Form 2.1 (a) of the Petitioner for FY 2011-12, (which shall be considered by the Commission in the True-up exercise for FY 2011-12 after validation of the same), the Commission has considered the category wise / slab wise number of consumers, sales and connected load shown in it for the projection of the number of consumers, sale and connected load of subcategories/slabs of consumers category as the Commission felt that it shall not be prudent to make assumptions regarding the same.

(g) For projection of sales for DJB, which were included in the Non Domestic category till FY 2008-09 but were approved as a separate tariff category since FY 2009-10, the Commission is of the view that the sudden exclusion of DJB from the Non Domestic category and their subsequent segregation into a separate tariff category would depict an extremely distorted picture for making projections for FY 2012-13 to FY 2014-15. The Commission has, therefore, decided that DJB shall be included in the Non Domestic category only for the limited purpose of projecting the total sales of the Non Domestic category in FY 2012-13 to FY 2014-15. Thereafter, the specific quantum of sales to DJB is isolated proportionately from the total quantum of Non Domestic sales, based on the average of actual proportion of this sales to the total sales to the Non Domestic category (inclusive of DJB) observed in FY 2011-12.

4.11 The Commission has approved the sales/ connected load/ number of consumers of each consumer category as detailed below:

Domestic Consumers

4.12 The Commission has observed that the energy sales to the domestic category in FY 2011-12 is 2870.59 MU, which is a growth of 4.99% from that in the preceding year, FY 2010-11. The CAGR calculated over the past five year period (FY 2006-07 to FY 2011-12), four year period (FY 2007-08 to FY 2011-12), three year period (FY 2008-09 to FY 2011-12) and two year period (FY 2009-10 to FY 2011-12) are 9.77%, 9.37%, 10.88% and 8.62% respectively.

4.13 The major reasons contributing to the increase in domestic sales in the recent past were metering of un-metered consumers, electrification of JJ clusters, billing of SPD under the slab “Domestic lighting/fan and power”, etc. Considering the above, for FY 2011-12, the Commission has projected an increase in sales to this category at the rate of 10.88% over the actual sales for FY 2011-12, which is the 3-year CAGR, the same being the most appropriate indicator of the trend.

4.14 Based on the methodology detailed above, the Commission approves energy sales of 3182.85 MU, 3529.08 MU and 3912.97 MU for the domestic category for FY 2012-13, FY 2013-14 and FY 2014-15 respectively.

4.15 For projection of sale to subcategories of domestic consumers, the Commission has used the ratio of actual sales in the subcategory to total domestic sales of the Petitioner observed in FY 2011-12.

4.16 For projection of number of consumers and connected load in the Domestic category in FY 2012-13, FY 2013-14 and FY 2014-15 the above mentioned approach has been followed. Accordingly, growth rates of 7.62% and 8.15% respectively have been used to project the number of consumers and connected load for FY 2012-13 to FY 2014-15.

Non-Domestic Consumers

4.17 In the non-domestic category, the CAGR calculated over the past five year period (FY 2006-07 to FY 2011-12), four year period (FY 2007-08 to FY 2011-12), three year period (FY 2008-09 to FY 2011-12) and two year period (FY 2009-10 to FY 2011-12) are 9.81%, 10.20%, 11.18% and 8.86% respectively, while, the growth rate for FY 2011-12 over the past year FY 2010-11 is 7.15%.

4.18 The Commission has decided that using an extremely short-term basis for projection would not be sufficient to capture the growth trend justifiably. The Commission has also observed that the year on year growth rate observed in FY 2009-10 over FY 2008-09 being abnormally high at 15.96%, using a 5 year CAGR would not have been appropriate either. Hence, the quantum of sales to this category has been projected using an average of the year-on-year growth observed in the past five years (excluding the above mentioned outlier), which is calculated as 8.71%.

4.19 Based on the methodology detailed above, the Commission has arrived at energy sales of 1489.42 MU, 1619.22 MU and 1760.33 MU to the non-domestic category (inclusive of DJB and exclusive of temporary connections to this category) for FY 2012-13, FY 2013-14 and FY 2014-15 respectively vis-à-vis 1370.03 MU in FY 2011-12.

4.20 Based on the proportion of sales to DJB to the total sales of the non-domestic category (including DJB) in FY 2011-12, the Commission has projected sales of 187.12 MU, 203.43 MU and 221.16 MU to DJB in FY 2012-13, FY 2013-14 and FY 2014-15 respectively vis-à-vis 172.12 MU in FY 2011-12.

4.21 For computing revenue as per the approved tariff schedule which treats DJB as a part of the 'Others' category, the remaining energy sales for FY 2012-13 of 1302.30 MU (1489.42 MU deducted by 187.12 MU) are considered as sales to the non-domestic category, excluding DJB, while sales to DJB are taken as a part of the 'Others' category. Similarly, the energy sale to Non-Domestic, excluding DJB for FY 2013-14 and FY 2014-15 are 1415.79 MU and 1539.17 MU respectively.

4.22 For projection of sale to subcategories of non domestic consumers, the Commission has used the ratio of actual sales in the subcategory to total non domestic sales of the Petitioner observed in FY 2011-12.

4.23 For projection of number of consumers and connected load in the non-domestic category in FY 2012-13 to FY 2014-15, the above mentioned approach has been followed. Accordingly, growth rates of 5.97% and 4.39% have been used to project the number of consumers and connected load respectively.

Industrial Consumers

4.24 An assessment of the growth in sales to this category indicates variations in growth in the TPDDL area with the year-on-year growth rate ranging from 2.67% to 7.02% in the past five years. While the 5-year and 4-year CAGR for sales is 7.02% and 3.67%, the 3-year CAGR is 4.37% and the 2-year CAGR is 3.41%, the rate of growth of sales in FY 2011-12 over FY 2010-11 is 2.67%.

4.25 The consumption in the industrial category in FY 2011-12 is 2014.41 MU, which is 2.67% higher than 1961.96 MU sold to this category in FY 2010-11.

4.26 For projecting the sales for FY 2012-13 to FY 2014-15, the Commission analysed the trend in sales and the economic outlook of the State for the forthcoming year. In line with the approach of excluding the outliers in the growth rates observed in the last five years, the Commission has projected an increase in sales to this category at a growth rate of 4.37% which is the 3-year CAGR for this category, the same being the most appropriate indicator of the trend.

4.27 Based on the methodology detailed above, the Commission approves energy sales of 2102.37 MU to the Industrial category for FY 2012-13, 2194.17 MU for FY 2013-14 and 2289.98 MU for FY 2014-15.

4.28 For projection of sale to subcategories of industrial consumers the Commission has used the ratio of actual sales in the subcategory to total industrial sales of the Petitioner observed in FY 2011-12.

4.29 For projection of number of consumers and connected load in the industrial category in FY 2012-13 to FY 2014-15, the above mentioned approach has been followed. Accordingly, growth rates of -8.18% and -3.16% have been used to project the number of consumers and connected load respectively.

Public Lighting

4.30 The sales to this category have shown widely varying growth rates in recent years. The immediate growth rate in FY 2011-12 over FY 2010-11 has been observed to be 8.20% and 2-year, 3-year, 4-year and 5-year CAGR are 32.21%, 12.76%, 9.54% and 7.61% respectively. Considering the huge variations in sales in respect of this category, the Commission has decided to project the sales considering the 5-year CAGR of 7.61% for FY 2012-13 in order to smoothen out year-to-year variations in sales.

4.31 The quantum of energy sales to this category is, therefore, projected at 103.36 MU, 111.22 MU and 119.68 MU for FY 2012-13, FY 2013-14 and FY 2014-15 respectively. The quantum of energy sales to this category was 96.05 MU in FY 2011-12.

Irrigation and Agriculture

4.32 The Commission has analysed that the actual sales under this category have also shown widely varying growth in the recent years. While the immediate growth rate in FY 2011-12 over FY 2010-11 comes out to be -2.37%, 2-year, 3-year, 4-year and 5-year CAGR are -8.98%, -13.84%, 9.45% and 12.45% respectively. Considering the huge variations in sales in respect of this category, the Commission has decided to project the sales under this category for FY 2012-13 to FY 2014-15 considering the 5-year CAGR of 12.45%.

4.33 The quantum of energy sales to this category is, therefore, projected at 17.91 MU for FY 2012-13, 20.14 MU in FY 2013-14 and 22.64 MU in FY 2014-15, vis-à-vis 15.92 MU sold to this category in FY 2011-12.

Railway Traction

4.34 The Commission has approved sales projections to this category at 67.85 MU, 72.26 MU and 76.96 MU respectively for FY 2012-13, FY 2013-14 and FY 2014-15, as per the submissions made by the Petitioner to the Commission.

DMRC

4.35 The Commission has considered the submissions made by DMRC to the Commission for approving sales at 190 MU for FY 2012-13, 200 MU for FY 2013-14 and 220 MU for FY 2014-15.

Other Categories

4.36 The Petitioner's own consumption, enforcement and temporary connections have been included in the "Others" category.

4.37 An assessment of the growth in sales to this category indicates large variations in growth rates in the TPDDL area on a year-to-year basis, with the CAGR ranging from 3.11% (1-year CAGR) to 26.55% (3-year growth rate). The Commission feels that it is difficult to project the sales to this category, based on past years trend and therefore, has decided to keep the sales under this category for FY 2012- 13 to FY 2014-15 at the level of last Financial Year, FY 2011-12, i.e. 115.13 MU.

All Categories

4.38 The Commission approves the following energy sales for the Petitioner for FY 2012-13 to FY 2014-15:

Table 43: Approved Sales for FY 2012-13 to FY 2014-15 (MU)

Particulars	FY 2012-13		FY 2013-14		FY 2014-15	
	Petitioner's Submission	Approved	Petitioner's Submission	Approved	Petitioner's Submission	Approved
Domestic	3,105.39	3,182.85	3,384.87	3,529.08	3,689.51	3,912.97
Non-Domestic*	1,386.33	1,302.30	1,538.82	1,415.79	1,708.09	1,539.17
Industrial	2,100.60	2102.37	2,226.63	2194.17	2,360.23	2289.98
Public Lighting	104.26	103.36	112.60	111.22	121.61	119.68
Irrigation & Agriculture	17.44	17.91	19.52	20.14	21.85	22.64
Railway Traction	67.85	67.85	72.26	72.26	76.96	76.96
DMRC	174.93	190.00	183.68	200.00	192.86	220.00
Others#	265.60	302.25	290.73	318.56	311.69	336.29
Total	**7,222.39**	**7,268.89**	**7,829.12**	**7,861.22**	**8,482.80**	**8,517.70**

** Excluding DJB; # Including DJB.*

Revenue in FY 2012-13 at Existing Tariff

4.39 As per the two-part tariff principle followed in the NCT of Delhi, the tariff for each category consists of fixed/ demand charges as well as energy charges. The fixed/ demand charges are specified for different categories as a fixed amount per month, or as a fixed amount per kW of connected load per month. The energy charges, on the other hand, are always usage-based and are specified per unit of electricity consumed.

4.40 For Domestic consumers with connected load less than 2 kW, the revenue from fixed charges is calculated by multiplying the corresponding fixed charge with the number of consumers in that particular tariff slab. For Domestic consumers with connected load exceeding 5 kW, the revenue from demand charges is calculated by multiplying the specified demand charge with the connected load (in kW) of the category. For calculation of revenue from energy charges, the actual usage is multiplied by the applicable tariff category slab.

4.41 For the Non Domestic, Industrial, Railway Traction, DMRC and DJB categories, billing is done either on kW or kVA basis, as specified in the approved tariff schedule for FY 2011-12. Since projections for FY 2012-13 to FY 2014-15 are done only on kW basis for connected load and on kWh basis for energy sales, whenever the tariff is specified in kVA/ kVAh terms, the relevant kW/ kWh projection is divided by the Power Factor in order to obtain the corresponding kVA/ kVAh projection. Thereafter, revenue from demand charges is calculated by multiplying the demand charge of each tariff slab with the connected load of that slab, while revenue from energy charges is calculated by multiplying the energy charges specified for each tariff slab with the energy consumption projected for that slab.

4.42 The Power Factor for each tariff slab where the tariff is specified in kVA/ kVAh terms has been considered as per the Form 2.1(a) for FY 2011-12 submitted by the Petition. The Power Factor considered by the Commission for different categories is shown below:

Table 44: Power Factor considered by the Commission

Consumer slab	Power Factor
Non Domestic Low Tension (NDLT)	
Between 10-100 kW	*0.91*
Above 100 kW	*0.91*
Non Domestic High Tension (NDHT)	
Non-Domestic Light/ Power on 11 kV Single Delivery Point for Commercial Complexes	*0.90*
Supply in 11 kV and above (above 100 kW)	*0.90*
Small Industrial Power (SIP)	
Between 10-100 kW	*0.92*
Above 100 kW	*0.93*
Large Industrial Power (LIP)	
Supply on 11 KV and above (above100 kW)	*0.96*
Industrial Power on 11 kV Single Delivery Point for Group of Consumers	*0.94*
Railway Traction (other than DMRC)	0.88
DMRC	0.98
DJB	0.85

4.43 Based on the above methodology, the Commission has projected the total revenue billed in FY 2012-13 to be Rs. 4006.11 Cr. The category-wise revenue billed projected by the Commission for FY 2012-13 is shown below:

Table 45: Revenue projected for FY 2012-13 (Rs Cr)

Summary of Revenue	Fixed Charges	Energy Charges	Total Revenue Billed
Domestic	57.72	1250.52	1308.24
Non-Domestic*	106.53	859.65	966.18
Industrial	91.91	1239.18	1331.09
Public Lighting	0.00	57.88	57.88
Irrigation & Agriculture	0.39	3.22	3.61
Railway Traction	4.43	34.68	39.12
DMRC	4.89	73.55	78.44
Others (DJB, Temporary, Misuse, Enforcement etc.)	11.42	210.13	221.55
Total	277.29	3728.82	4006.11
Total Revenue Collected @ 99.50% Collection Efficiency			**3986.08**

**Exclusive of DJB*

AT&C Losses

Petitioner's Submission

4.44 The Petitioner has submitted that in view of the 13% AT&C loss target that has been fixed for the Petitioner for FY 2011-12, sustainability of this loss level and further reduction of the same is a great challenge.

4.45 The Petitioner has also submitted that since past arrears (i.e DVB Arrears) have already been collected to a large extent and balance remaining arrears have been written off pursuant to GoNCTD's Policy Direction of May 2008, therefore collection efficiency is expected at 99.50% for FY 2012-13 onwards. The Petitioner has also requested the Commission to recalculate the base year AT&C target of 13% excluding the LPSC income, DVB arrear etc. as per the 2nd MYT Regulations, 2011, and accordingly set the target for the Control Period.

4.46 The Petitioner has proposed average 0.25% reduction per year in AT&C losses with a cumulative loss reduction of 0.75% for Control Period i.e. FY 2012-13 to FY 2014-15. The Petitioner has further proposed that out of 0.25% annual loss reduction, a minimum of 0.22% reduction per year with a cumulative target of 0.75% may be fixed for the Control Period.

Table 46: Proposed AT&C losses for the Control Period

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Distribution Loss	12.31%	12.06%	11.81%
Collection Efficiency	99.50%	99.50%	99.50%
AT&C Loss	12.75%	12.50%	12.25%

Commission's Analysis

4.47 During the Policy Direction Period, Delhi adopted AT&C loss (Aggregate Technical and Commercial Loss) as a measure of efficiency which indicated the difference between units input into the distribution system and the units for which payment is collected or realised. The opening level of losses was determined by the Commission in its Order on "Bulk Supply Tariff for February-March 2002 and Opening Level of AT&C Losses" for the three Distribution Licensees on February 22, 2002.

4.48 AT&C loss reduction target for the Policy Direction Period from FY 2002-03 till FY 2006-07 was used as a bidding parameter for privatising the distribution system. GoNCTD had stipulated minimum loss reduction target of 20% from the baseline loss levels, which was later agreed at 17% over a period of 5 years for each of the three licensees.

4.49 The incentivisation framework specified that any benefit of loss reduction beyond the target level but below the Government stipulated minimum level was passed onto consumer entirely, while the achievement above the Government stipulated minimum level was shared equally between consumer and licensee. Any revenue loss due to underachievement in target loss reduction was borne by the licensee.

4.50 The targets fixed under the transfer scheme and the AT&C losses achieved by the distribution companies from FY 2002-03 to FY 2006-07 i.e. prior to the previous MYT Control Period have been as under:

Table 47: AT&C Loss levels (FY 2002-03 - FY 2006-07)

DISCOM	Opening levels		FY 2002-03	FY 2003-04	FY 2004-05	FY 2005-06	FY 2006-07
BYPL	57.2	Target	56.45	54.70	50.70	45.05	39.95
		Achievement	61.89	54.29	50.12	43.89	39.03
BRPL	48.1	Target	47.55	46.00	42.70	36.70	31.10
		Achievement	47.40	45.06	40.64	35.53	29.92
NDPL	48.1	Target	47.60	45.35	40.85	35.35	31.10
		Achievement	47.79	44.86	33.79	26.52	23.73

4.51 The Commission introduced the previous MYT Regulations for the period FY 2007-08 to FY 2010-11 and fixed the AT&C Loss reduction targets to be achieved by the distribution utilities at the end of the Control Period. The year wise targets and actual achievement for FY 2007-08 to FY 2010-11 has been as under:

Table 48: AT&C Loss levels (FY 2007-08 – FY 2010-11)

DISCOM		FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
BYPL	Target	34.77	30.52	26.26	22.00
	Achievement	29.80	24.02 *	24.32	21.95
BRPL	Target	26.69	23.46	20.23	17.00
	Achievement	27.17	20.59*	20.53	18.82

DISCOM		FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
NDPL	Target	22.03	20.35	18.67	17.00
	Achievement	18.56	16.74	15.16	13.10*
NDMC	Target	11.13	10.75	10.38	10.00
	Achievement	14.79	13.72	10.25	11.94

**As claimed by the Discom, but not approved by the Commission*

4.52 During the true-up for FY 2008-09 and FY 2009-10, it came to light that there were certain inconsistencies in the methodology for computing the actual achievements of AT&C loss (for estimation of energy in kWh corresponding to enforcement amount realised, exclusion of DVB arrears from amount realised, considering LPSC realised after allowing borrowing cost etc.) which were corrected while doing these true-ups. The revised methodology is now being carried forward in subsequent true-ups also.

4.53 The above achievements against the challenging targets have been possible as a result of the substantial capital investments which have been made by the distribution licensees for improving the distribution network and thereby reducing technical and commercial losses, government support in the form of special courts for power theft related cases, police support during theft control drives, etc.

4.54 In view of a writ petition No. 4821/201 filed in the High Court of Delhi, the process of tariff determination for FY 2010-11 could not be completed and no Tariff Order could be issued and also new MYT Regulations could not be framed. The Commission on May 10, 2011 passed an Order extending the previous MYT Regulations by one more year and fixed following AT&C loss targets for FY 2011-12:

Table 49: AT&C Loss levels (FY 2011-12)

DISCOM	FY 2011-12
BYPL	18.00
BRPL	15.00
NDPL	13.00
NDMC	9.60

AT&C Loss reduction targets for the Control Period (FY 2012-13 to FY 2014-15)

4.55 While fixing the AT&C loss reduction targets for the Control Period (FY 2012-13 to FY2014-15), the Commission has been guided by:

(a) The achievements in AT&C loss reduction vis-à-vis targets fixed by the Commission since 2002, capital expenditure programs, review of the consumer mix of Delhi, metering status, etc.

(b) Delhi is an urban area with very small number of agricultural consumers (less than 0.1% of total sales) and with 100 percent retail consumer metering.

(c) Loss levels in similar private urban distribution licensees, such as Ahmedabad Electricity Supply Company, BEST and BSES, Mumbai, Torrent Power Limited, Gujarat and public utilities viz., MGVCL in Gujarat and BESCOM in Karnataka.

4.56 Considering the past trend of AT&C loss reduction vis-à-vis targets fixed, the expectations of various stakeholders as expressed during the Public Hearings, the need is felt to continue with the trajectory of AT&C loss reduction into the next Control Period, especially in view of the fact that all distribution licensees still have areas where losses are significantly higher than the average AT&C losses achieved by them (above 40% in many areas). None of the distribution licensees have pleaded for higher AT&C loss targets on the grounds of the targets proposed by the Commission being technically incapable of being achieved. This matter, therefore, has to be seen in the context of the higher level of commercial losses for which the distribution utilities have to intensify their efforts. The Commission is of the view that it is not only desirable to fix challenging targets, but to make all efforts to see that these are achieved in the overall interest of determining tariffs which are fair and equitable and help in taking the Delhi Distribution business towards achievements of performance benchmarks set by the best distribution utilities in the country.

4.57 The AT&C loss targets as approved by the Commission for the Control Period is given below:

Table 50: AT&C Loss Targets approved by the Commission (%)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Distribution Loss Target	12.06%	11.56%	11.06%
Collection Efficiency Target	99.50%	99.50%	99.50%
AT&C Loss Target	12.50%	12.00%	11.50%

Energy Requirement

4.58 The quantum of power purchase is decided by the expected sale of energy by the Licensee, as well as the targeted loss levels. Higher expected sales require a greater quantum of power to be purchased. Similarly, higher loss levels also require a proportionately greater amount of power purchase by the Licensee because it needs to meet the expected sales (in MU) after accounting for various losses in the process of supplying electricity.

4.59 The energy sale for each year is grossed up by the distribution loss level for the year, to arrive at the required quantum of power purchase for that year in the following manner:

$$\text{Quantum of power purchase (MU)} = \frac{\text{Energy sales}}{(1 - \text{Distribution Loss (\%)}/100)}$$

Petitioner's Submission

4.60 Based on the proposed loss reduction trajectory and energy sales proposed, the Petitioner has proposed the following energy balance for each year of the Control Period:

Table 51: Proposed Energy Requirement

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Sales (MU)	7222	7829	8482
Distribution losses (%)	12.31	12.06	11.81
Energy Input (MU) Requirement	8236.47	8902.63	9619.24

Commission's Analysis

4.61 The Commission has computed the energy requirement for the Control Period as per the approved sales and T&D losses. The approved energy requirement for the Control Period is summarised below:

Table 52: Energy Requirement approved by the Commission

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Sales (in MU)	7268.89	7861.22	8517.70
Distribution Losses (%)	12.06	11.56	11.06
Energy Requirement (in MU)	8265.76	8888.54	9576.39

Determination of Aggregate Revenue Requirement

4.62 The Commission has analyzed all the components of the Aggregate Revenue Requirement (ARR) submitted by the Petitioner to approve suitable values for each component, for each year of the Control Period. As per the MYT Regulations, 2011 the ARR for the distribution function shall include the following components:

(a) Power Purchase Cost (including transmission charges and load dispatch charges)

(b) Operations and Maintenance Expenses;

(c) Return on Capital Employed;

(d) Depreciation;

(e) Income Tax;

(f) Interest on Consumer Security Deposit

(g) Less: Non-Tariff Income; and

(h) Less: Income from other businesses or other receipts.

Power Purchase

4.63 Power purchase cost is the single largest component in the ARR of a distribution company. Hence, it is imperative that this element of cost is estimated with utmost care based on the most efficient way of procuring power from the generating stations through long term/short term arrangements or through bilateral purchases agreements.

Allocation of Power from Central and State Generating Stations

Petitioner's Submission

4.64 The Petitioner has submitted that the allocation from stations like Kahalgaon I, Kahalgaon II and Farakka has been reduced to 6.07%, 10.49% and 1.39% respectively by NRPC vide its order dated 30.03.2010 and the same has been considered in the projection.

4.65 The Petitioner has submitted that unallocated quota from CSGS is on the discretion of the Central Government and hence the same has been considered zero for the period FY 2012-13 to FY 2014-15.

4.66 The Petitioner has submitted that Singrauli (NTPC) will be crossing its useful life by FY 2014-15 and hence has not considered energy from this station for projecting the power purchase cost for FY 2014-15.

4.67 Further, the Petitioner has submitted that while its share for FY 2010-11 in the unallocated quota with the Delhi Government should be increased to 31% as per the sharing formula (based on power consumption pattern for the past 4-5 years) in line with increase in demand in its area, the GoNCTD has been continuously allocating a lower quantum to it (23.19%). The Petitioner has requested the Commission to ensure that the lower share allotted to the Petitioner from the unallocated quota is not continued subsequently. However, given the current allocation of only 23.19%, the same has been considered for projections for the Control Period.

Commission's Analysis

4.68 Delhi has firm allocated share in Central Sector Generating Stations (CSGS) of National Thermal Power Corporation (NTPC), National Hydroelectric Power Corporation (NHPC), Tehri Hydro Development Corporation (THDC), Satluj Jal Vidyut Nigam Limited (SJVNL) and Nuclear Power Corporation Limited (NPCIL). The Commission has considered allocation of firm power from the above mentioned generating stations as per the allocation specified in the notification no. Revision # 03 / 2012-13 dated 21 April, 2012 of Northern Regional Power Committee.

4.69 The distribution of unallocated quota from the above mentioned plants varies from time to time based on power requirement and power shortages in different States. Therefore, the Commission has considered the unallocated share for the said stations equivalent to the unallocated quota for FY 2011-12 which has arrived based on the total percentage share of each station and percentage allocation of firm share for each station in Delhi for FY 2011-12. The total share is sourced from REA of March 2012, Notification No. ERPC/COM-I/REA/2012/183-223 dated April 3, 2012.

4.70 The firm share, unallocated share and Delhi's share of firm & unallocated share from the Central Sector Generating Stations is summarised below:

Table 53: Allocation of Power to Delhi from Central Sector Generating Stations

Stations	Installed Capacity (in MW)	Firm Share of Delhi (%)	Unallocated Share of Delhi (%)	Firm & unallocated Delhi Share (%)
NTPC Plants				
ANTA GAS	419.33	10.50%	0.45%	10.95%
AURAIYA GAS	663.36	10.86%	0.31%	11.17%
DADRI GAS	829.78	10.96%	0.21%	11.17%
FARAKKA	1600.00	1.39%	-	1.39%
KAHALGAON –I	840	6.07%	-	6.07%
KAHALGAON-II	1500	10.49%	-	10.49%
NCPP (DADRI THERMAL)-I	840	90%	-	90.00%
RIHAND –I	1000	10.00%	0.44%	10.44%
RIHAND –II	1000	12.60%	0.44%	13.04%
SINGRAULI	2000	7.50%	0.44%	7.94%
UNCHAHAR-I	420	5.71%	0.14%	5.85%
UNCHAHAR-II	420	11.19%	0.44%	11.63%
UNCHAHAR-III	210	13.81%	0.44%	14.25%
DADRI-II	980	75%	-	75.00%
NHPC Plants				
BAIRA SIUL	180	11.00%	-	11.00%
CHAMERA-I	540	7.90%	-	7.90%
CHAMERA-II	300	13.33%	0.53%	13.86%
DHAULIGANGA	280	13.21%	0.44%	13.65%
DULHASTI	390	12.83%	0.44%	13.27%
SALAL	690	11.62%	-	11.62%
TANAKPUR	94.20	12.81%	-	12.81%
URI-I	480	11.04%	-	11.04%
SEWA-II	120	13.33%	0.44%	13.77%
Others				
TEHRI HEP	1000	10.30%	0.29%	10.59%
NJPC (SATLUJ)	1500	9.47%	0.29%	9.76%
TALA HEP	1020	2.94%	-	2.94%
MEJIA # 6	250	11.76%	-	11.76%
NPCIL				
NPCIL - RAPS – 3&4	440	-	-	-
NPCIL - RAPS – 5&6	440	12.69%	0.67%	13.36%
NPCIL – NAPS	440	10.68%	0.43%	11.11%

4.71 Government of NCT of Delhi (GoNCTD) through its letter no. F.11 (41)/2007-Power/PF-1/14350 dated May 20, 2011 has revised the allocation of unallocated power generation share of GoNCTD in Central Power Station (Dadri and BTPS) and Delhi Power Generation Stations (RPH, GT, PPCL) from April 1, 2011 onwards. According to the above, the allocation of 323.5 MW of unallocated power quota is extended for auxiliary consumption for IP station equivalent to 1 MW. Also, 0.9 MW power which was allocated to Aravali power plant, Jhajjar for construction activities is now available to Delhi as the plant has now become operational. Therefore, 0.9 MW has been equally allocated among BRPL, BYPL and TPDDL.

4.72 As per the said letter, the allocation of balance 321.6 MW power quota among distribution companies is reassigned as follows:

Table 54: Allocation of Unallocated quota to Delhi DISCOMs

DISCOM	Quantum of power
BYPL	39.65% of available power i.e. 127.5 MW + 0.3 MW = 127.8 MW
TPDDL	30.94% of the available power i.e. 99.5 MW + 0.3 MW = 99.8 MW (From 10.00 A.M to 05.00 P.M) 37.16% of the available power i.e. 119.5 MW + 0.3 MW = 119.8 MW (For rest of the time)
BRPL	23.19% of available power i.e. 74.5 MW+0.3 MW = 74.8 MW
NDMC	6.22% of the available power i.e. 20 MW (10:00 AM to 05:00 P.M)

4.73 The unallocated power (15%) from NDMC's share in Dadri, BTPS and Pragati (PPCL-I) would be at the disposal of the GoNCTD and may be allotted by the Government to the needy DISCOM(s).

4.74 If GoNCTD allocates the unallocated power in any manner other than the assumption considered in the preceding paragraphs above, the same shall be accounted for at the time of True-Up of power purchase costs in the subsequent Orders.

4.75 The allocation considered by the Commission for projection of power availability from the Delhi Stations is summarised below:

Table 55: Allocation from Delhi Stations to TPDDL

Stations	Assigned Capacity (MW)^^	Firm Allocation to Delhi (85%) (MW)^^	Unallocated Share (MW)^^	Share from Firm Allocation	Share from Unallocated Power	Total Share for FY 2011-12 (MW)
BTPS*	530	450.50	79.50	29.18%	35.35%	166.18
Dadri**	631	536	94.65	29.18%	35.35%	196.59
IP Station***	0	0	0	29.18%	35.35%	0.00
Rajghat#	133.1	113	19.97	29.18%	35.35%	40.37^
Gas Turbine##	270	229.5	40.50	29.18%	35.35%	81.28
Pragati###	230	195.50	34.50	29.18%	35.35%	74.54
Total	**1794.10**	**1524.99**	**269.12**			**558.97**

* *Total installed capacity of BTPS is 705 MW. However, 530 MW is allocated to BRPL, BYPL and TPDDL. Remaining 175 MW is allocated to NDMC and MES.*

** *Total installed capacity of Dadri is 840 MW, 756 MW allocated to Delhi of which 631MW is allocated to BRPL, BYPL and TPDDL. Remaining 125MW is allocated to NDMC.*

*** *IP station has been de-Commissioned*

Total installed capacity of Rajghat is 135MW. However 0.9 MW power was given as construction power to Aravali Power Project at Jhajhar and 1.0 MW as auxiliary power for IP station

The capacity has been de-rated from 330 MW to 270 MW

$ *Figures rounded off to zero decimal places*

Total installed capacity of Pragati 330 MW. However, 230MW is allocated to BRPL, BYPL and TPDDL. Remaining100 MW is allocated to NDMC.

^ *The total share of Rajghat includes 0.3 MW additional power as per GoNCT letter dated 20.05.2011*

^^ *Excluding allocation to NDMC and MES*

Energy Availability from the Generating Stations in the Delhi System

Petitioner's Submission

4.76 For State Generating Stations, energy availability estimates for the period FY 2012-13 to FY 2014-15 have been projected by the Petitioner based on the following assumptions:

(a) The estimates for the FY 2012-13 to FY 2014-15 are based on the average actual PLF for the period FY 2007-08 to FY 2010-11 for the respective months, prorated for TPDDL's firm as well as unallocated share in each station.

(b) While estimating power availability from GT Station of Delhi, the rated capacity of each of the three units has been derated to 30 MW as decided by DERC.

(c) With regard to IP Station, since the same has been decommissioned w.e.f. 1 November 2009, no energy availability has been projected from this station for the Control Period. Similarly, RPH has already crossed its useful life therefore it has not been considered while projecting the power purchase cost from FY 2012-13 onwards.

4.77 Based on the above mentioned assumptions, the Petitioner has projected the quantum of power purchase from Delhi Generating Stations as shown below:

Table 56: Proposed power purchase quantum from Delhi Generating Stations for the Control Period (MU)

Generating Stations	FY 2012-13	FY 2013-14	FY 2014-15
BTPS	1035.42	1035.42	1035.42
Dadri	1416.56	1416.56	1416.56
Rajghat	-	-	-
GTPS	361.83	361.83	361.83
PPCL-I	483.1	483.1	483.1
Total	**3296.92**	**3296.92**	**3296.92**

Commission's Analysis

4.78 The Commission has computed the energy availability from the State Generating Stations i.e. Rajghat, Gas Turbine and PPCL-I based on the approved PLF and auxiliary consumption in the respective Tariff Order for IPGCL and PPCL-I stations for the Control Period.

4.79 For BTPS the energy availability has been computed based on the station PLF taken as an average for the last three Financial Years (FY 2009-10 to FY 2011-12) and auxiliary consumption as approved in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, hereinafter referred to as "CERC Tariff Regulations, 2009".

4.80 For Dadri-I, the energy availability has been computed based on the station PLF taken as an average for last three Financial Years (FY 2009-10 to FY 2011-12) and auxiliary consumption as per the CERC Tariff Regulations, 2009.

4.81 The effective share of firm and unallocated power from these plants has been applied on the net energy available from each plant to compute the total energy available for the Petitioner during each year. The effective share for the Petitioner has been computed based on the allocation of power from Delhi system generating stations discussed earlier under "Allocation of Power from Central and State Generating Stations".

4.82 The Commission is of the opinion that actual power availability from the generating stations in Delhi System may vary from the projected units based on the actual units generated and share of the Petitioner in unallocated power. However, since power purchase quantum is an uncontrollable parameter and it will be subjected to true up at the end of the year.

4.83 The projected net energy available to the Petitioner during each year of the Control Period from the generating stations in Delhi System is summarised below:

Table 57: Approved Energy Available from Delhi Generating Stations (MU)

Generating Station	FY 2012-13	FY 2013-14	FY 2014-15
BTPS	1038.69	1038.69	1038.69
NCPP (Dadri Thermal)	1304.35	1304.35	1304.35
Rajghat	235.31	235.31	235.31
Gas Turbine (GTPS)	552.54	552.54	552.54
PPCL -I	538.40	538.40	538.40
Total Units	**3669.29**	**3669.29**	**3669.29**

Energy Availability from Central Generating Stations

Petitioner's Submission

4.84 Based on the proposed energy balance, the Petitioner has projected energy availability from Generating Stations within Delhi, Central Generating Stations, new generating plants expected to be commissioned during the control period as well as power procurement through short term sources and banking arrangements.

4.85 For Central Generating Stations, energy availability estimates for the period FY 2012-13 to FY 2014-15 have been projected by the Petitioner based on the following assumptions:

(a) For NTPC plants, the Petitioner has considered the average actual PLF of the plants in the last 5 years (i.e. FY 2006-07 to FY 2010-11) for the respective months, pro-rated for TPDDL's firm as well as unallocated share. For plants which have been running for less than 5 years, the projection has been considered based on actual data available for shorter period.

(b) For NHPC hydro stations, energy availability estimates have been proposed based on the month wise Design Energy of each plant in their respective water studies (as mentioned in the CERC Orders). However, for Tala station, the month wise average of actual generation in FY 2007-08, FY 2008-09 & FY 2009-10 has been considered and pro-rated for TPDDL's firm as well as unallocated share, since the Design Energy was not available.

4.86 Based on the above mentioned assumptions, the Petitioner has projected the quantum of power purchase from Central Generating Stations as shown below:

Table 58: Proposed power purchase quantum from CSGS for the Control Period (MU)

Generating Station	FY 2012-13	FY 2013-14	FY 2014-15
NTPC			
Singruali	319.9	319.9	-
Rihand-I	218.93	218.93	218.93
Rihand-II	288.94	288.94	288.94
Unchahar-I	53.65	53.65	53.65
Unchahar_II	104.69	104.69	104.69
Unchahar_III	64.85	64.85	64.85
Anta	79.78	79.78	79.78
Auriya	131.02	131.02	131.02
Dadri GPP	168.23	168.23	168.23
Farakka	42.1	42.1	42.1
Kahalgaon-I	98.27	98.27	98.27
NTPC TOTAL	1570.36	1570.36	1250.47
NHPC			
Dulhasti Hep	71.39	71.39	71.39
Dhauliganga HEP	43.74	43.74	43.74
Chamer-I Hep	38.37	38.37	38.37
Chamera-II Hep	58.34	58.34	58.34
Bairasiul HEP	25.01	25.01	25.01
SalalHEP	104.5	104.5	104.5
Tanakpur HEP	16.9	16.9	16.9

Generating Station	FY 2012-13	FY 2013-14	FY 2014-15
Uri HEP	83.35	83.35	83.35
Sewa II HEP	18.22	18.22	18.22
NHPC TOTAL	459.82	459.82	459.82
Others			
Nathpa Jhakri HEP	166.36	166.36	166.36
Tehri-I Hep	79.62	79.62	79.62
TALA HEP	30.82	30.82	30.82
OTHERS TOTAL	276.79	276.79	276.79
Nuclear			
NAPS	42	42	42
NUCLEAR TOTAL	42	42	42
Total – Existing stations	**2348.98**	**2348.98**	**2029.08**

Commission's Analysis

4.87 The Commission has computed the gross energy available from the existing NTPC stations based on the installed capacity and PLF for each plant which is taken as an average for the last three Financial Years (FY 2009-10 to FY 2011-12). Net energy sent out from each plant is estimated after deducting the auxiliary consumption applicable as per CERC Tariff Regulations, 2009.

4.88 The effective share of the Petitioner from each generating station has been applied to compute the total energy availability from NTPC stations.

4.89 Power purchase quantum from NHPC Stations has been computed as per the month-wise design energy shown by each plant in their respective water studies (as mentioned in various CERC Orders) and the auxiliary consumption has been considered as per CERC Tariff Regulations, 2009.

4.90 The power availability from other hydro plants like Nathpa Jhakri and Tala HEP has been considered based on the design energy of the respective plants whereas the power availability for Tehri HEP has been considered based on the program energy. The auxiliary consumption has been considered as per CERC Tariff Regulations, 2009.

4.91 The Commission has considered energy availability from the NPCIL-NAPS and RAPS 5&6 station based on the actual PLF recorded by CEA in its monthly generation report (for February) for FY 2011-12, the same has been considered for approving energy availability from NAPS station. The auxiliary consumption for NAPS has been considered as given in the MYT Order.

4.92 The effective share of the Petitioner is applied on the energy sent out to estimate the energy availability for the Petitioner from respective stations. The energy available to the Petitioner as per the projections made by the Commission is summarised below:

Table 59: Energy Available from Central Sector Generating Stations (MU) approved by the Commission

Source / Station	FY 2012-13	FY 2013-14	FY 2014-15
NTPC			
ANTA GAS	80.04	80.04	80.04
AURAIYA GAS	134.74	134.74	134.74
DADRI GAS	181.02	181.02	181.02
FARAKKA	39.02	39.02	39.02
KAHALGAON Stage 1	78.16	78.16	78.16
KAHALGAON Stage 2*	247.82	247.82	247.82
RIHAND-I	227.53	227.53	227.53
RIHAND-II	292.44	292.44	292.44
SINGRAULI	341.93	341.93	341.93
UNCHAHAR-I	53.40	53.40	53.40
UNCHAHAR-II	104.18	104.18	104.18
UNCHAHAR-III	65.05	65.05	65.05
DADRI EXTN 5&6*	1532.05	1532.05	1532.05
ARAVALI POWER CORPORATION LIMITED	-	-	-
NTPC Total	**3377.37**	**3377.37**	**3377.37**
NHPC			
BAIRA SIUL	24.84	24.84	24.84
CHAMERA-I	37.91	37.91	37.91
CHAMERA-II	59.95	59.95	59.95
DHAULIGANGA	44.66	44.66	44.66
DULHASTI	72.96	72.96	72.96
SALAL	103.46	103.46	103.46
TANAKPUR	16.73	16.73	16.73
URI	82.35	82.35	82.35
SEWA-II	13.50	13.50	13.50
NHPC Total	**456.36**	**456.36**	**456.36**
OTHERS			
TEHRI HEP	94.53	94.53	94.53
NJPC (SATLUJ)	196.61	196.61	196.61
TALA HEP	34.15	34.15	34.15
MEJIA # 6	59.73	59.73	59.73
Others Total	**385.01**	**385.01**	**385.01**
NUCLEAR			
NPCIL – RAPS – 3&4	-	-	-
NPCIL – RAPS – 5&6*	116.30	116.30	116.30
NPCIL – NAPS	55.95	55.95	55.95
Nuclear Total	**172.25**	**172.25**	**172.25**
Total Unit Availability from Central Generating Stations	**4390.98**	**4390.98**	**4390.98**

**included by the Petitioner under new stations*

Energy Availability from New Stations

Petitioner's Submission

4.93 The Petitioner has projected the quantum of power purchase from new/future Generating Stations as shown below:

Table 60: Proposed power purchase quantum from New Generating Stations for the Control Period (MU)

Generating Stations	FY 2012-13	FY 2013-14	FY 2014-15
Dadri Stage II	1453.24	1453.24	1453.24
Kahalgaon II	311.11	311.11	311.11
Koldam	49.42	99.12	99.12
RAPS 5 & 6	101.79	101.79	101.79
DVC	792.78	792.78	792.78
NTPC Jhajjar	1503.27	1503.27	1503.27
Pragati III	879.7	1759.4	1759.4
Maithon	1673.82	2233.8	2233.8
CLP Jhajajr	923.3	923.3	923.3
Rihand III	53.47	214.47	214.47
Barh II	25.54	146.43	207.16
Parbati HEP-III	23.86	47.85	47.85
Chamera-III	14.77	29.62	29.62
Uri-II	10.79	21.65	21.65
Rampur HEP		23.4	46.92
Koteshwar HEP	45.55	45.55	45.55
TPDDL Generation	535.32	535.32	535.32
Total	**8397.73**	**10242.08**	**10326.33**

Commission's Analysis

4.94 The Commission has analysed the Petitioner's submission of energy availability from new plants to be commissioned during the Control Period. The Petitioner has considered the availability of power from a number of thermal and hydel stations which are due to be commissioned during the Control Period. Since the actual CoD for these stations may be delayed the Commission vide letters dated March 12, 2012, March 30, 2012 and April 11, 2012 requested CEA to provide the details regarding the upcoming plants up to FY 2014-15. Subsequently, CEA vide letter dated March 16, 2012 provided the list of stations along with installed capacity, Delhi's share and estimated CoD. Therefore, the Commission has considered the latest data made available by the CEA to project energy availability from new stations.

4.95 The Commission has also supplemented the information obtained from CEA with submissions made by the licensees and the latest information available on the status of various projects.

4.96 The energy availability from CLP Jhajjar in which only TPDDL has a share amongst the Delhi DISCOMs has been approved in line with CoD made available by CEA.

4.97 For projection of energy availability from DVC stations, the Commission vide letter dated February 21, 2012 requested DVC to provide the details of the stations from which Delhi DISCOMs will be receiving power. DVC vide letter dated March 9, 2012 provided the list of stations along with share of each DISCOM in Delhi in the allocated capacity.

4.98 The Commission has, however, not considered any power for the purpose of projection of energy availability during the Control Period from APCL Jhajjar as the Discoms have already surrendered the power from that station up to June 2012 and have applied for surrender in subsequent months. The Commission has not considered any power from Rithala Generating Station as the Commission has not approved PPA or tariff for the Rithala station.

4.99 The date of CoD and availability of power from the new stations as considered by the Commission FY 2012-13 to FY 2014-15 is shown in the table below.

Table 61: Dates of Energy Available from Future Stations as Approved by the Commission

Plant	Owning Agency	CoD Considered by the Commission
Barh –I	NTPC	Not Considered till FY15
Barh –II		Beyond March-13
Koldam HEP		Beyond September-13
Rihand III		Unit V : Beyond Sep-12 Unit VI : Beyond Feb-13
Aravali Power Corporation Ltd		Not Considered
Chamera III	NHPC	Beyond March-13
Parabati III		Unit I : Beyond Sep-12 Unit II : Beyond Dec-12 Unit III : Beyond Sep-13 Unit IV : Beyond Dec-13
Parabati II		Beyond Sep-14
Uri II		Beyond March-13
Mejia-II 7&8	DVC	Unit 7 : 02-Aug-11 Unit 8 : 01-Apr-12
Durgapur 1&2		Unit 1 : 16-May-12 Unit 2 : Beyond Sep-13
Koderma 1&2		Unit 1 : Beyond Apr-13 Unit 2 : Beyond Jan-14
Chandrapura 7&8		Unit 7 : 15-Jul-11 Unit 8 : 02-Nov-11
Maithon TPS	Tata Power & DVC	Unit I : Beyond Apr-12 Unit II : Beyond Oct-12
Koteshwar	THDC	Beyond April-12
Tehri Pump Storage		Not Considered till FY15
Rampur		Not Considered till FY15
Pragati -III, Bawana	SGS	GT 1 : 27-Dec-11 GT 2: Beyond July-12 STG 1: Beyond Apr-12 GT 1 : Beyond Sep-12 GT 2: Beyond Jan-13 STG 2: Beyond Nov-12
TPDDL Generation	TPDDL	Not considered

Plant	Owning Agency	CoD Considered by the Commission
CLP Jhajjar	Reliance	Unit I : 31-Mar-12 Unit II : Beyond Oct-12
Sasan UMPP	Reliance	Beyond Oct-13

** Petitioner has projected power from DVC stations but has not submitted the list of DVC stations*

4.100 The Commission has considered energy availability from new generating stations based on 85% availability for thermal and gas plants. For hydel stations (excluding Chamera III, Uri II and Koteshwar HEP), the Commission has considered the Capacity Utilisation Factor (CUF) at 45%. The energy availability from Chamera III, Uri II and Koteshwar HEP has been taken equal to 1104 MU, 1124 MU and 1234 MU respectively as per the design energy of the station.

4.101 Since the generation for hydel stations vary in each month of the year and the monthly design energy for new plants is not available therefore, to estimate the monthly power availability from new hydro stations, the Commission has applied the percentages which have been arrived at by taking the monthly design energy for existing stations over the annual design energy for the same stations.,

4.102 Auxiliary consumption for new stations has been considered in line with the CERC Tariff Regulations, 2009-14.

4.103 The share of the Petitioner in energy available from PPCL-III, Bawana has been considered at 20.69% as per information provided by DTL vide letter no F/DTL/207/11-12/Mgr (SO)/75 dated March 30, 2012.

4.104 The effective share of the Petitioner as per the reassignment Order (Order No. F.11 (41)/2007-power/PF-1/1430 dated 20 May, 2011) has been applied on the ex-bus generation from all other future stations to estimate the total energy purchases from the respective NTPC, NHPC, DVC and other stations for each year of the Control Period.

4.105 The Petitioner has indicated that it would like to surrender the allocated capacity from Mejia Unit 7&8 and Durgapur Unit 1&2. The same has been approved by the Commission. However, no communication has been received from the DVC of acceptance of this proposal. Pending the conformation from DVC, the Commission has considered the power from all DVC stations to be available to the Petitioner.

4.106 The energy available to the Petitioner as per the revised projections by the Commission for each year of the Control Period from the new stations is summarised below:

Table 62: Energy Available from Future Stations as Submitted by the Petitioner and as Approved by the Commission (MU)

Source	FY 2012-13	FY 2013-14	FY 2014-15
Aravali Power Corporation Ltd	-	-	-
Barh -II(2*660)Mw	-	205.64	205.63
Chamera III	-	35.9	35.9
Chandrapur Extn (U7 & U8)	593.16	593.17	593.16

Source	FY 2012-13	FY 2013-14	FY 2014-15
Durgapur TPS	400.11	685.02	914.18
Koderma TPS	-	981.33	1574.42
Mejia Unit 7&8	1777.58	1777.58	1777.58
CLP Jhajjar	649.59	918.99	918.99
Koldam HEP	-	25.13	99.07
Koteshwar HEP	35.15	35.15	35.15
Maithon TPS	1353.32	2032.76	2032.76
TPDDL Generation	-	-	-
Parabati III	4.43	28.35	47.83
Parbati –II	-	-	18.91
Pragati -III, Bawana	924.26	2048.87	2048.87
Rampur HEP	-	-	-
Rihand III	75	257.04	257.04
Sasan UMPP(6*660)	-	61.35	148.29
Uri II	-	40.59	40.59
Total	**5812.58**	**9726.98**	**10,748.35**

Power Purchase Quantum from Other Sources: Intra-State, Bilateral & Banking

Petitioner's Submission

4.107 Other than power availability against the Long Term PPAs, the Petitioner makes bilateral as well as banking arrangements to balance its energy requirement. Further, it also makes short term arrangements to balance the demand and supply on day to day and 15-minute time interval basis.

4.108 From FY 2012-13 onwards, the Petitioner has not considered any short term bilateral purchase on the assumption that the Petitioner would be in power surplus scenario due to commissioning of new plants. In this scenario, the Petitioner has submitted that it plans to sell the surplus power through tenders, Power Exchange or UI. The rate of sale of such power has been considered to be Rs. 3.20/unit, on the basis of actual sales executed by the Petitioner till October 2011. Proceeds from the sale of surplus power go towards reducing the net power purchase cost charged to consumers.

Table 63: Projected power purchase quantum through other sources (MU)

Details	FY 2012-13	FY 2013-14	FY 2014-15
Power Purchase from Other Sources			
Sale of power (including Banking sale)	5362.42	6486.85	5551.53

Commission's Analysis

4.109 Based on the analysis of energy availability from various sources and the requirement of power for sale in the distribution area of the Petitioner, the Commission is of the view that the Petitioner would have an overall surplus power for sale to others in each year of the Control Period.

4.110 The Commission has considered the quantum of power to be purchased through intra-state purchases during each year of the Control Period to be nil.

4.111 The Commission has assumed that the surplus power available to the Petitioner will be sold entirely under bilateral arrangements for each year of the Control Period.

4.112 The Commission has considered that the energy which will be banked through forward banking, same day banking, same day/ day ahead trading in energy exchange and forward trading, if any, will be accounted for at the time of True-Up exercise. The units purchased and sold through other sources are summarised below:

Table 64: Energy Purchase /Sales through Other Sources approved by the Commission (MU)

	FY 2012-13	FY 2013-14	FY 2014-15
Bilateral Sales (MU)	4930.47	7992.67	8254.27

Power Purchase Cost

Cost of Power Purchase from Existing Stations

Petitioner's Submission

4.113 The Petitioner has made the following assumptions for estimating the power purchase cost from various sources:

(a) The Fixed Cost of various power plants from FY 2012-13 onwards has been considered based on the new CERC Tariff Regulations, 2010 and based on provisional Tariff Orders issued by CERC for the period FY 2009-14. For FY 2014-15, the Petitioner has considered a 3% escalation in fixed charges.

(b) In case of fixed cost of Delhi Gencos, the same has been escalated by 3% on year-on-year basis over the base value of FY 2011-12 to reach the values for the Control Period.

(c) Variable cost of thermal and gas stations has been escalated by 5% on year-on-year basis over the base rate of FY 2011-12 (till October 2011), to estimate variable charges for each station for the Control Period.

4.114 On the basis of the assumptions made for power purchase quantum and cost, the Petitioner has proposed power purchase cost for the Control Period, as tabulated below:

Table 65: Proposed power purchase cost for the Control Period – Existing Stations

Generating stations	FY 2012-13		FY 2013-14		FY 2015-16	
	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)
NTPC						
Singruali	319.90	66.40	319.90	69.34		0.00

Generating stations	FY 2012-13		FY 2013-14		FY 2015-16	
	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)
Rihand-I	218.93	52.08	218.93	55.27	218.93	57.66
Rihand-II	288.94	70.26	288.94	72.41	288.94	75.53
Unchahar-I	53.65	16.99	53.65	17.71	53.65	18.50
Unchahar_II	104.69	34.35	104.69	34.37	104.69	35.90
Unchahar_III	64.85	23.39	64.85	24.07	64.85	25.10
Anta	79.78	37.25	79.78	38.93	79.78	40.75
Auriya	131.02	53.88	131.02	57.11	131.02	59.75
Dadri GPP	168.23	68.09	168.23	72.99	168.23	76.38
Farakka	42.10	18.96	42.10	19.93	42.10	20.86
Kahalgaon-I	98.27	38.72	98.27	40.40	98.27	42.22
NTPC TOTAL	1570.36	480.37	1570.36	502.52	1250.47	452.65
NHPC						
Dulhasti Hep	71.39	38.69	71.39	38.47	71.39	39.08
Dhauliganga HEP	43.74	9.15	43.74	9.17	43.74	9.34
Chamer-I Hep	38.37	6.36	38.37	6.43	38.37	6.54
Chamera-II Hep	58.34	11.29	58.34	11.17	58.34	11.36
Bairasiul HEP	25.01	3.51	25.01	3.69	25.01	3.80
SalalHEP	104.50	10.41	104.50	10.76	104.50	11.08
Tanakpur HEP	16.90	3.61	16.90	3.70	16.90	3.77
Uri HEP	83.35	14.33	83.35	14.55	83.35	14.99
Sewa II HEP	18.22	7.84	18.22	7.68	18.22	7.91
NHPC TOTAL	459.82	105.18	459.82	105.61	459.82	107.86
Others						
Nathpa Jhakri HEP	166.36	45.78	166.36	46.49	166.36	47.22
Tehri-I Hep	79.62	39.20	79.62	39.20	79.62	39.20
TALA HEP	30.82	5.67	30.82	5.67	30.82	5.67
OTHERS TOTAL	276.79	90.66	276.79	91.36	276.79	92.09
Nuclear						
NAPS	42.00	9.07	42.00	9.07	42.00	9.07
NUCLEAR TOTAL	42.00	9.07	42.00	9.07	42.00	9.07
Total - Existing Central Stations	2348.98	685.28	2348.98	708.57	2029.08	661.66
State Stations						
BTPS	1035.42	440.12	1035.42	470.19	1035.42	491.34
Dadri	1416.56	553.07	1416.56	580.15	1416.56	606.52
GT	361.83	166.82	361.83	174.05	361.83	181.60
PPCL	483.10	161.27	483.10	168.14	483.10	175.31
Total	**3296.92**	**1321.29**	**3296.92**	**1392.52**	**3296.92**	**1454.78**

Commission's Analysis

4.115 The following methodology has been adopted by the Commission for estimation of the power purchase cost for each year of the Control Period from existing stations:

(a) The Commission has projected the variable cost for NTPC stations based on the average of the variable cost and FPA, submitted by BYPL and TPDDL for March 2012 as additional information, and an escalation of 5% during each year.

(b) The fixed charges for NTPC stations have been taken from the latest Tariff Orders issued by CERC up to June 7, 2012. The fixed charges for FY 2014-15 have been taken equal the fixed charges approved for each station in FY 2013-14.

(c) The Commission has approved the annual fixed charges for NHPC stations as per the latest order for the stations for which the order was passed by CERC for the period FY 2009-10 to FY 2013-14. The fixed charges for FY 2014-15 have been taken equal the fixed charges approved for each station in FY 2013-14.

(d) The Commission has considered the normative availability for hydel stations as per the CERC, 'Terms and conditions of Tariff regulations, 2009' and allowed the fixed cost based on the same.

(e) The fixed cost for state generating stations has been considered as per the MYT Order issued by the Commission for the respective generating stations for the Control Period. The variable of state generating stations has been estimated by considering an escalation of 5% on the approved Energy Charge Rate (ECR) per annum.

(f) The Commission has considered the actual single part tariff of NPCIL plants. For NAPS, the Commission has considered the rate as per March 2012 bills raised by NPCIL and for RAPS 5&6, as per the bills raised by NPCIL for the month of March 2012.

(g) The Commission for approving the annual fixed charges for Tehri HEP has considered the formula given in the March 2012 bills raised by THDC.

(h) The Commission has considered single part tariff for TALA HEP at Rs 2.02/kWh. Based on the power purchase bill raised by PTC for the month of March 2012.

(i) In case of Mejia unit-6, single part tariff of Rs 4.00/kWh which is in line with the average tariff charged by DVC during FY 2011-12.

(j) The Commission has computed the total power purchase cost considering fixed cost, variable cost (including FPA) and other charges (income tax, water cess etc) for each plant taking into account the approved energy availability and share of the Petitioner.

4.116 The total power purchase cost computed by the Commission is summarised below:

Table 66: Approved Total Power Purchase Cost for Existing Stations for Control Period (Rs. Cr)

Generating stations	FY 2012-13		FY 2013-14		FY 2014-15	
	Quantum (MU)	**Cost (Rs Cr)**	**Quantum (MU)**	**Cost (Rs Cr)**	**Quantum (MU)**	**Cost (Rs Cr)**
Central Generating Stations						
NTPC						
ANTA GAS	80.04	27.31	80.04	28.47	80.04	29.56
AURAIYA GAS	134.74	47.20	134.74	50.35	134.74	52.39
DADRI GAS	181.02	62.48	181.02	66.46	181.02	69.12
FARAKKA	39.02	15.98	39.02	16.85	39.02	17.50
KAHALGAON-I	78.16	30.65	78.16	31.92	78.16	33.01
KAHALGAON	247.82	97.31	247.82	101.14	247.82	104.25
RIHAND –I	227.53	45.01	227.53	47.00	227.53	48.48
RIHAND –II	292.44	61.67	292.44	63.43	292.44	65.40
SINGRAULI	341.93	71.11	341.93	74.29	341.93	77.10
UNCHAHAR-I	53.40	17.89	53.40	18.66	53.40	19.38
UNCHAHAR-II	104.18	36.42	104.18	36.72	104.18	38.14
UNCHAHAR-III	65.05	25.22	65.05	26.03	65.05	26.91
DADRI Extn Unit	1532.05	656.86	1532.05	677.63	1532.05	699.51
APCL	-	-	-	-	-	-
NTPC Total	**3377.37**	**1195.12**	**3377.37**	**1238.97**	**3377.37**	**1280.76**
NHPC						
BAIRA SIUL	24.84	3.56	24.84	3.65	24.84	3.65
CHAMERA-I	37.91	6.86	37.91	6.94	37.91	6.94
CHAMERA-II	59.95	15.54	59.95	15.39	59.95	15.39
DHAULIGANGA	44.66	12.24	44.66	12.26	44.66	12.26
DULHASTI	72.96	42.55	72.96	42.32	72.96	42.32
SALAL	103.46	9.27	103.46	9.42	103.46	9.42
TANAKPUR	16.73	3.61	16.73	3.68	16.73	3.68
URI	82.35	12.21	82.35	12.31	82.35	12.31
SEWA-_II	13.50	8.76	13.50	8.67	13.50	8.67
NHPC Total	**456.36**	**114.61**	**456.36**	**114.65**	**456.36**	**114.65**
Other stations						
TEHRI HEP	94.53	23.07	94.53	23.07	94.53	23.07
NJPC (SATLUJ)	196.61	42.49	196.61	42.49	196.61	42.49
TALA HEP	34.15	6.90	34.15	6.90	34.15	6.90
MEJIA TPS (Unit 6)	59.73	23.89	59.73	23.89	59.73	23.89
Others Total	**385.01**	**96.35**	**385.01**	**96.35**	**385.01**	**96.35**
NUCLEAR						
NPCIL - RAPS – 3&4	0.00	0.00	0.00	0.00	0.00	0.00
NPCIL - RAPS – 5&6*	116.30	39.68	116.30	39.68	116.30	39.68

Generating stations	FY 2012-13		FY 2013-14		FY 2014-15	
	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)
NPCIL – NAPS	55.95	13.59	55.95	13.59	55.95	13.59
Nuclear Total	**172.25**	**53.26**	**172.25**	**53.26**	**172.25**	**53.26**
Generating Stations						
BTPS	1038.69	487.61	1038.69	507.43	1038.69	528.25
NCPP	1304.35	502.78	1304.35	527.44	1304.35	548.43
Rajghat	235.31	117.00	235.31	121.96	235.31	127.24
GAS TURBINE	552.54	227.30	552.54	236.86	552.54	246.98
Pragati -I	538.40	175.56	538.40	181.66	538.40	188.81
SGS Total	**3669.29**	**1510.23**	**3669.29**	**1575.36**	**3669.29**	**1639.72**
Total Cost	**8060.27**	**2969.57**	**8060.27**	**3078.59**	**8060.27**	**3184.74**

**included by the Petitioner in new stations*

Cost of Power from New Generation Stations

Petitioner's Submission

4.117 For new/future stations, the per unit rate and date of commissioning considered by the Petitioner for projection of power purchase cost is as under:

Table 67: Proposed per unit rate and CoD of new stations

Station	FY 2012-13 (Paise/unit)	FY 2013-14 (Paise/unit)	FY 2014-15 (Paise/unit)	CoD
Koldam	350	361	382	Oct'12
CLP Jhajjar	215	238	267	U1 Jan'12, U2 Jul'12
Rihand III		391	415	U1 Oct'12, U2 Apr'13
Barh II		391	415	U1 Jan'13, U2 Nov'13
Maithon Long Term		295	315	Apr'12-Sep'12 150 MW, Oct'12-Mar'13 300 MW
Parbati HEP-III		361	382	Oct'12
Chamera-III		361	382	Oct'12
Uri-II		361	382	Oct'12
Koteshwar HEP	350	361	382	FY 12-13
TPDDL Generation	440	453	481	Block 1 Apr'11, Block 2 Aug'11
Pragati III	450	464	492	Block 1 Apr'12-Mar'13, Block 1+2 Apr'13 onwards

4.118 The Petitioner has submitted that rates of CLP Jhajjar have been taken as per Evaluated bids and LOI issued by Haryana, and the rate of Maithon Long Term is as per its tariff petition submitted in CERC. Rates of the remaining stations have been escalated by 3% on year-on-year basis over the base rate for FY 2011-12.

Table 68: Proposed power purchase cost for the Control Period – New Stations

Generating stations	FY 2012-13		FY 2013-14		FY 2015-16	
	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)
New/Future Stations						
RAPS 5 & 6	101.79	30.77	101.79	30.77	101.79	30.77
Dadri Stage II	1453.24	660.30	1453.24	680.41	1453.24	709.35
Kahalgaon II	311.11	117.52	311.11	122.63	311.11	128.16
Koldam	49.42	17.82	99.12	36.80	99.12	37.91
DVC	792.78	285.80	792.78	294.37	792.78	303.20
NTPC Jhajjar	1503.27	739.57	1503.27	764.64	1503.27	797.85
Pragati III	879.70	407.74	1759.40	839.94	1759.40	865.14
Maithon	1673.82	493.78	2233.80	681.31	2233.80	703.65
CLP Jhajajr	923.30	219.28	923.30	239.69	923.30	246.71
Barh I						
Rihand III	53.47	20.93	214.47	86.46	214.47	89.05
Barh II	25.54	10.00	146.43	59.03	207.16	86.02
Parbati HEP-III	23.86	8.60	47.85	17.77	47.85	18.30
Chamera-III	14.77	5.32	29.62	11.00	29.62	11.33
Uri-II	10.79	3.89	21.65	8.04	21.65	8.28
Rampur HEP		0.00	23.40	8.69	46.92	17.94
Koteshwar HEP	45.55	16.42	45.55	16.91	45.55	17.42
TPDDL Generation	535.32	242.61	535.32	249.89	535.32	257.38
Total	8397.73	3280.35	10242.08	4148.35	10326.33	4328.47

Commission's Analysis

4.119 The Commission has considered the power purchase cost for the following new generating stations as under:

(a) In case of Pragati-III, the Commission has considered the power purchase rate as Rs 4.50 per unit.

(b) In case of Maithon TPS, the Commission has considered the power purchase cost as Rs 3.58 per unit.

(c) In case of CLP Jhajjar, the rate has been assumed at Rs 3.35 per unit based on the information available to Commission.

4.120 For NHPC hydro plants, Rs. 4.50 per unit has been assumed for computing the power purchase cost.

4.121 In the absence of definite tariff for power available from DVC plants, the Commission has considered single part tariff of Rs. 4.00 per unit for the power procured from the

DVC plants which is in line with the average tariff charged by DVC during FY 2011-12.

4.122 The Commission is of the view that the power purchase cost as considered from new plants may vary and will be subject to True-Up based on the actual cost at the end of each year.

Table 69: Approved Power Purchase Cost for New Generation Stations (Rs. Cr)

Source	FY 2012-13		FY 2013-14		FY 2014-15	
	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)	Quantum (MU)	Cost (Rs Cr)
Aravali Power Corporation Ltd*	-		-		-	
Barh –II (2*660 MW)	-		205.64	92.53	205.63	92.53
Chamera III	-		35.90	16.15	35.90	16.15
Chandrapur Extn (U7 & U8)	593.16	237.26	593.17	237.27	593.16	237.26
CLP Jhajjar	649.59	217.61	918.99	307.86	918.99	307.86
Durgapur TPS	400.11	160.04	685.02	274.01	914.18	365.67
Koderma TPS	-		981.33	392.53	1574.42	629.77
Koldam HEP	-		25.13	11.39	99.07	44.58
Koteshwar HEP	35.15	15.82	35.15	15.82	35.15	15.82
Maithon TPS	1353.32	484.49	2032.76	727.73	2032.76	727.73
Mejia Unit 7&8	1777.58	711.03	1777.58	711.03	1777.58	711.03
TPDDL Generation	-		-		-	
Parabati III	4.43	2.00	28.35	12.76	47.83	21.52
Parbati –II	-		-	-	18.91	8.51
Pragati -III, Bawana	924.26	415.92	2048.87	921.99	2048.87	921.99
Rampur HEP	-	-	-	-	-	-
Rihand III	75.00	33.75	257.04	115.67	257.04	115.67
Sasan UMPP (6*660 MW)	-	-	61.35	7.34	148.29	17.74
Uri II	-	-	40.59	18.26	40.59	18.26
Total	**5812.58**	**2277.91**	**9726.98**	**3862.32**	**10748.35**	**4252.10**

**included in the existing stations by the Petitioner*

Cost of Power from Other Sources

Petitioner's Submission

4.123 The Petitioner has not considered any bilateral or direct purchase assuming surplus power being available from FY 2012-13 onwards, majorly due to upcoming power plants in future. Any sudden shortage will be met through day-ahead market through power exchange.

Commission's Analysis

4.124 The Commission has considered that there will be no requirement of power purchase for meeting the seasonal demand in the Petitioner's area of operation through intra-state purchase.

4.125 With regards to the rate of sale of surplus power, the Commission observes that the estimated average landed cost of power purchase (after including transmission losses and charges) for the Petitioner is Rs 4.17/unit in FY 2012-13, Rs 4.23/unit in FY 2013-14 and Rs 4.30/unit in FY 2014-15. As against this the Petitioner has proposed the rate of sale of surplus power at only Rs 3.20/unit.

4.126 The average rate at which power was sold by the Petitioner during FY 2010-11 was Rs 2.96/unit. In the same year the average rate of sale of power achieved by BRPL, BYPL and NDMC was Rs 3.21/unit, Rs 3.54/unit and Rs 2.94/unit respectively.

4.127 The Commission observes that if the Petitioner were to sell surplus power at a rate that is lower than the average landed cost (/unit) at which it purchases the power, it shall result in an additional burden being imposed on the consumers on account of the transaction of sale and purchase of power.

4.128 Taking into account the interests of the consumers and the actual rate at which power has been sold by the DISCOMs in the past, the Commission has considered a rate of Rs 4.00/unit for the sale of surplus power by the Petitioner during each year of the Control Period.

Table 70: Approved Cost of Power Purchase/Sale through Other Sources (Rs. Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Bilateral Sales (Rs Cr)	1972.19	3197.07	3301.71

Transmission Losses and Charges

Petitioner's Submission

4.129 The Petitioner has computed the transmission charges for FY 2012-13 onwards by taking 5% escalation year-on-year on the base rate of FY 2011-12. One time costs have been excluded from the projections.

4.130 The Petitioner has also submitted that in view of Service Tax on Transmission being claimed by the Service Tax Department, it the event that the same is payable by the Petitioner, it shall be claimed separately for the relevant periods, being a statutory payment.

4.131 The Petitioner has submitted that the transmission losses for NR and ER have been calculated taking into consideration actual POC (drawl / injection) losses for the period of 1 July 2011 to 31 October 2011.

4.132 Further 1.25% losses have been considered for intrastate transmission losses based on the Minutes of 11th Commercial Sub Committee Meeting held on 18.10.2011 in SLDC. For Bilateral Export / Sale only the Intra-state Losses of 1.25% have been considered.

Commission's Analysis

4.133 In the absence of consolidated data for the eastern grid for FY 2011-12, the Commission has considered the eastern region losses based on the average of the weekly losses reported by ERPC on its website from April 1, 2010 to March 27, 2011 at 2.43%. The losses for the northern region have considered based the average losses for FY 2011-12 at 3.55%, as reported on the NRPC website.

4.134 The intra-state transmission losses of 1.20% have been approved based on the actual losses for FY 2011-12 reported by Delhi Transco Limited on its website.

4.135 The Commission has approved inter-state transmission charges by considering an inflation factor of 5% per annum on the actual transmission charges submitted by the Petitioner for FY 2011-12.

4.136 The intra-state transmission charges have been allowed based on the ARR approved by the Commission for Delhi Transco Limited (DTL) for each year of the Control Period. The charges for SLDC have been projected by escalating the approved SLDC charges for FY 2010-11 by 5% per annum.

4.137 The PGCIL and DTL transmission losses and the cost is summarised below:

Table 71: Transmission Losses and Charges approved by the Commission for Control Period

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Transmission Losses (in MU)			
Inter-State (PGCIL)	515.92	700.48	760.83
Intra-State (DTL)	160.70	205.57	217.13
Total Transmission Losses	**676.62**	**906.05**	**977.96**
Transmission Charges (Rs. Cr)			
Inter-State (PGCIL)	172.58	181.21	190.27
Intra-State (DTL) including SLDC charges	196.88	166.74	191.56
Total Transmission Charges	**369.46**	**347.95**	**381.82**

Rebate on Power Purchase and Transmission Charges

Commission's Analysis

4.138 With regards to rebate on power purchase and transmission charges the MYT Regulations 2011 states that –

"5.23 Distribution Licensee shall be allowed to recover the net cost of power it procures from sources approved by the Commission, viz. Intra-state and Inter-state Trading Licensees, Bilateral Purchases, Bulk Suppliers, State generators, Independent Power Producers, Central generating stations, non-conventional energy generators, generation business of the Distribution Licensee and others, assuming maximum normative rebate available from each source for payment of bills through letter of credit on presentation of bills for supply to consumers of Retail Supply Business;"

4.139 Accordingly, the Commission has considered power purchase rebate @ 2% of the gross power purchase cost and transmission rebate @ 2% of the total transmission and SLDC charges for projection of the normative rebate on the power purchase cost.

Table 72: Rebate on Power purchase and Transmission Charges approved by the Commission for Control Period (Rs. Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Power Purchase Rebate @ 2%	104.95	138.82	148.74
Rebate on Transmission Charges @ 2%	7.39	6.96	7.64

Energy Balance

Petitioner's Submission

4.140 The Energy Balance for FY 2012-13 to FY 2014-15 projected by the Petitioner is provided below:

Table 73: Proposed Energy Balance Summary and Power Purchase Cost for the Control Period

Description	FY 2012-13			FY 2013-14			FY 2014-15		
	Quantum (MU)	Amount (Rs Cr)	Rate (Rs/unit)	Quantum (MU)	Amount (Rs Cr)	Rate (Rs/unit)	Quantum (MU)	Amount (Rs Cr)	Rate (Rs/unit)
Power Purchase from CSGS	10748.25	3868.35	3.60	11712.90	4347.23	3.71	11477.26	4474.13	3.90
Inter-State Bilateral Purchase	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PGCIL Losses	(392.62)			(449.36)			(432.84)		
Power Purchase from Delhi Gencos	3295.38	1418.57	4.30	4,175.08	1902.20	4.56	4175.08	1970.78	4.72
Intra-State Power Purchase	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Power Availability at Delhi Periphery	13651.01	5286.92	3.87	15438.62	6249.43	4.05	15219.49	6444.91	4.23
DTL Losses	(104.26)			(112.69)			(121.76)		
Power available to DISCOM	13546.75	5286.92	3.90	15325.93	6249.43	4.08	15097.73	6444.91	4.27
Less: Surplus Power sold/Banked/UI sales	(5310.28)	(1699.29)	3.20	(6423.30)	(2055.46)	3.20	(5478.49)	(1753.12)	3.20
Power required for TPDDL's consumers	8,236.47	3587.63	4.36	8902.63	4193.98	4.71	9619.24	4691.79	4.88
Transmission Charges									
PGCIL charges and ULDC Charges		263.62			301.64			310.35	

Description	FY 2012-13			FY 2013-14			FY 2014-15		
DTL charges		201.42			211.49			222.06	
Power required for TPDDL's consumers	8236.47	4052.67	4.92	8902.63	4707.11	5.29	9619.24	5224.21	5.43

4.141 The Petitioner has submitted that reactive energy charges have not been included in its power purchase projections, and will be claimed based on actuals at the time of true-up. The Commission in its order dated 16 July, 2010 in the matter of "Determination of Reactive Energy Charges" had revised the rates for reactive energy to 10 paise/kVARh with an escalation of 0.5paise/kVARh per year.

Commission's Analysis

4.142 Total power purchase for the Control Period as approved by the Commission is summarised in Table 74 below.

Table 74: Energy Balance for the Control Period approved by the Commission

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	Quantum (MU)	**Amount (Rs Cr)**	**Rate (Rs/unit)**	**Quantum (MU)**	**Amount (Rs Cr)**	**Rate (Rs/unit)**	**Quantum (MU)**	**Amount (Rs Cr)**	**Rate (Rs/unit)**
Power Purchase from CSGS#	11507.91	4240.03	3.68	15422.31	5892.99	3.82	16443.68	6345.55	3.86
PGCIL losses & Charges	515.92	172.58		700.48	181.21		760.83	190.27	
Power purchase from Delhi Stations$	2364.94	1007.46	4.26	2364.94	1047.92	4.43	2364.94	1091.29	4.61
Power Available at Delhi Periphery	13356.93	5420.06		17086.77	7122.12		18047.80	7627.11	
DTL loss & Charges including SLDC Charges	160.70	196.88	12.25	205.57	166.74	8.11	217.13	191.56	8.82
Power Purchase Rebate @ 2%		104.95			138.82			148.74	
Rebate on Transmission Charges @ 2%		7.39			6.96			7.64	
Power available to DISCOM	13196.23	5504.60	4.17	16881.20	7143.08	4.23	17830.66	7662.29	4.30
Sales	7268.89			7861.22			8517.70		
Distribution loss	996.88			1027.32			1058.70		
Required Power	**8265.76**	**3532.42**	**4.27**	**8888.54**	**3946.01**	**4.44**	**9576.39**	**4360.58**	**4.55**
Surplus/ (Deficit) Power available at DISCOM Boundary	**4930.47**	**1972.19**	**4.00**	**7992.67**	**3197.07**	**4.00**	**8254.27**	**3301.71**	**4.00**

* *Average cost in Rs per unit*

\# *Includes NTPC (except BTPS), NHPC, SJVNL, THDC, NPCIL, Dadri TPS, and Future Stations*

$ *Includes BTPS, PPCL, IP Stations, Rajghat and GTPS*

Power Purchase Adjustment

4.143 The Distribution Licensees procure power from central generating stations, state generating stations through the long-term power purchase agreements and through short-term purchases. The power purchase cost accounts for about 80% of Annual Revenue Requirement of the distribution licensees and includes the cost paid for procurement of power, transmission charges, UI charges, SLDC/RLDC charges. The net power purchase cost after deducting amounts realized from sale of surplus power is considered for purpose of ARR.

4.144 The Commission recognizes that the power purchase costs are uncontrollable in nature and are volatile making it difficult to accurately estimate power purchase costs at the time of annual tariff fixation. The power purchase cost is beyond the control of distribution licensees and dependent upon following factors:

(a) Price of Fuel (Coal/Gas) which is highly unpredictable as has been seen from the data of past few years.

(b) Availability of power from new sources.

(c) Weather conditions such as extreme harsh summers/cold which have direct impact on the demand.

(d) Demand supply gap of power within the country.

4.145 Any fluctuation in the cost of fuel is a pass through for the generator through a fuel price adjustment formula and is payable by the distribution licensees in their monthly bills.

4.146 Power purchase cost being uncontrollable, in nature, is pass-through to the consumers but the difference in actual cost of procurement of power and the estimated cost of purchase of power gets trued up only after 2 years. The time lag of two years puts additional burden on consumers by way of interest charges which have to be borne by the consumers, additionally.

4.147 A public hearing was held in the Commission’s court room from April 26, 2012 to April 30, 2012 regarding the petitions filed by the TPDDL, BRPL, BYPL and NDMC for true-up of expenses for FY 2010-11 and approval of ARR and Generation Tariff for FY 2012-13 to FY 2014-15. In the public hearing, stakeholders put forth their comments/suggestions before the Commission in the presence of the Petitioner. Some of the stakeholders put forth their views on power purchase adjustments also.

4.148 The Commission heard the stakeholders, consumers and the petitioners at length. The Commission has also pursued the suggestions and objections of various stakeholders and consumers received in the Commission. Further, the Commission has examined the entire record placed before the Commission and also considered the relevant provisions of the Electricity Act, 2003, Rules & Regulations made there under, Tariff Policy and National Electricity Policy.

4.149 The Commission observed that Section 62(4) of the Electricity Act, 2003 provides that:

"No tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified"

4.150 The provision 5.3(4) of the Tariff Policy provides that:

"Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation taxes and cess, variations in power purchase unit costs including on account of hydro-thermal mix in case of adverse natural events."

4.151 The Hon'ble ATE vide in its judgment dated November 11, 2011 in the matter of Suo-Motu action on the letter received from Ministry of Power (O.P. 1 of 2011) has observed that the Power Purchase Cost is a major expenditure in the ARR of the Distribution Licensee. Both the Fuel and Power Purchase Cost are uncontrollable and both have to be allowed to be recovered as quickly as possible.

4.152 In view of the above, Commission has decided to implement a Power Purchase Cost Adjustment for generating stations having long term PPA's with DISCOMs on quarterly basis in order to adjust the changes in the Power Purchase Cost levied by these Generating Companies on the Distribution Companies.

4.153 The power purchase adjustment mechanism will ensure that these changes are passed on to the consumer in a timely manner instead of being deferred to the time when true up is carried out for the Discoms and then recovered with carrying cost.

4.154 The Commission does not intend to include the variation on account of short term power purchase and sale in the power purchase adjustment since it would require prudence check and would delay quarterly Power Purchase Adjustment.

4.155 The Power Purchase Adjustment would be done according to the formula given below:

Power Purchase Adjustment (PPA) formula

$$\text{PPA for } n^{th} \text{ Qtr. (\%)} = \frac{(A-B)*C}{\left\{Z * \left(1-\frac{\text{Distribution losses in \%}}{100}\right)\right\} * ABR}$$

Where,

A = Total units procured in (n-1)th Qtr (in kWh) from power stations having long term PPAs – (To be taken from the bills of the Gencos issued to distribution licensees)

B = Proportionate bulk sale of power from Power stations having long term PPAs in $(n-1)^{th}$ Qtr (in kWh)

$$= \frac{\text{Total bulk sale in } (n-1)^{th} \text{ Qtr (in kWh)} * A}{\text{Gross Power Purchase including short term power in } (n-1)^{th} \text{ Qtr (in kWh).}}$$

Total bulk sale and gross power purchase in $(n-1)^{th}$ Qtr to be taken from provisional accounts to be issued by SLDC by the 10^{th} of each month

C = Actual average Power Purchase Cost (PPC) from power stations having long term PPAs in (n-1)th Qtr (Rs./ kWh) – Projected average Power Purchase Cost (PPC) from power stations having long term PPAs (Rs./ kWh) (from tariff order).

Z= [{Actual Power purchased from Central Generating Stations having long term PPA in $(n-1)^{th}$ Qtr (in kWh) $*(1 - \frac{\text{PGCIL losses in \%}}{100})$ + Power from Delhi Gencos including BTPS (in kWh)} $*(1 - \frac{\text{DTL losses in \%}}{100})$ – B] in kWh

Power from Delhi Gencos including BTPS to be taken from provisional accounts to be issued by SLDC by the 10^{th} of each month

ABR = Average Billing Rate for the year (to be taken from the Tariff Order)

Distribution Losses (in %) = Target Distribution Losses (from Tariff Order)

PGCIL Losses (in %)

$$= 100 \times \frac{\text{Approved PGCIL losses in Tariff Order (kWh)}}{\text{Approved Long Term Power Purchase from Central Generating Stations having long term PPA in the Tariff Order (kWh)}}$$

$$\text{DTL Losses (in \%)} = \frac{\text{Approved DTL Losses (from the Tariff Order)}}{\text{Power available at Delhi periphery (from energy balance table tariff order)}}$$

Table 75: Schedule – Base Cost FY 2012-13*

Name of the station	Gross power purchase	Total Cost	Average rate
ANTA GAS	80.04	27.31	3.41
AURAIYA GAS	134.74	47.20	3.50
DADRI GAS	181.02	62.48	3.45
FARAKKA	39.02	15.98	4.10
KAHALGAON-I	78.16	30.65	3.92
KAHALGAON STAGE-II	247.82	97.31	3.93
RIHAND -I	227.53	45.01	1.98
RIHAND -II	292.44	61.67	2.11

Name of the station	Gross power purchase	Total Cost	Average rate
SINGRAULI	341.93	71.11	2.08
UNCHAHAR-I	53.40	17.89	3.35
UNCHAHAR-II	104.18	36.42	3.50
UNCHAHAR-III	65.05	25.22	3.88
Dadri Ext. unit 5&6	1532.05	656.86	4.29
RAPS - 5&6	116.30	39.68	3.41
NPCIL - NAPS	55.95	13.59	2.43
BTPS	1038.69	487.61	4.69
NCTPS (Dadri)	1304.35	502.78	3.85
Rajghat	235.31	117.00	4.97
GAS TURBINE	552.54	227.30	4.11
Pragati -I	538.40	175.56	3.26
BAIRA SIUL	24.84	3.56	1.43
CHAMERA-I	37.91	6.86	1.81
CHAMERA-II	59.95	15.54	2.59
DHAULIGANGA	44.66	12.24	2.74
DULHASTI	72.96	42.55	5.83
SALAL	103.46	9.27	0.90
TANAKPUR	16.73	3.61	2.16
URI-I	82.35	12.21	1.48
Sewa-II	13.50	8.76	6.49
TEHRI HEP	94.53	23.07	2.44
NJPC (SATLUJ)	196.61	42.49	2.16
TALA HEP	34.15	6.90	2.02
DVC Mejia-6	59.73	23.89	4.00
Mejia-II (Unit 7&8)	1777.58	711.03	4.00
Chandrapura- 7&8	593.16	237.26	4.00
Maithon (Unit-1 & 2)	1353.32	484.49	3.58
Koteshwar(Unit-1, II, III, IV)	35.15	15.82	4.50
PPCL-III, Bawana	924.26	415.92	4.50
CLP Jhajjar	649.58	217.61	3.35
GRAND TOTAL	**13393.31**	**5051.70**	**3.77**

**Power Purchase Cost of stations from which power is being received as on March 31, 2012 have been considered for calculation of the Base Rate*

4.156 In order to give effect to the Power Purchase Adjustment (PPA) on quarterly basis the following be implemented:

(a) The PPA will be charged to all categories of consumers.

(b) The PPA for any quarter would be charged only after it is approved by the Commission.

(c) The weighted average base cost in Rs/kWh shall be as approved in this Tariff Order for FY 2012-13, as given below.

TPDDL = Rs. 3.77*

* Detailed computation is given in Table 75 above for TPDDL. The Schedule will be revised in every subsequent Tariff Order

(d) In case power is procured from those sources considered as surrendered in this tariff order, then PPAC shall be considered as applicable to them as well.

(e) The Distribution licensee shall submit to the Commission the details in respect of changes in power purchase cost of plants having long term PPAs, as listed in Table 75, for the $(n-1)^{th}$ quarter. Further, Auditor's Certificate along with statement indicating plant-wise details of fixed charges, variable charges, other charges and units purchased from each plant having long term PPA, as listed in Table 75, for the $(n-1)^{th}$ quarter shall be furnished along with the proposal of PPA surcharge submitted for the Commission's approval.

(f) The percentage of PPA will be rounded off to two decimal places.

(g) The percentage increase on account of PPA will be applied as a surcharge on the total energy and fixed charges (excluding theft bills, arrears, LPSC, E. Tax etc.) billed to a consumer of the utility.

(h) The bill format shall clearly identify the PPA percentage and amount of PPA billed as separate entries.

(i) The PPA calculated for any quarter, the first quarter being July-September 2012, shall be applied prospectively for 3 months after approval is received from the Commission.

(j) In view of the fact that PPA computed for any quarter will be applied after a time delay for a subsequent 3-month period, there would necessarily be a difference between the actual power purchase cost increase and the recovery by the distribution utility through the quarterly adjustments. The difference will be adjusted at the time of annual true-up undertaken by the Commission for that year.

(k) This Power Purchase Adjustment (PPA) formula shall remain applicable till it is amended, reviewed, revised or otherwise amended.

Operation and Maintenance Expenses

4.157 As per MYT Regulations 2011 the Operation and Maintenance (O&M) expenses for a licensee shall include:

(a) Salaries, wages, pension contribution and other employee costs;

(b) Administrative and General expenses which shall also include expense related to raising of loans;

(c) Repairs and Maintenance; and

(d) Other miscellaneous expenses, statutory levies and taxes (except corporate income tax).

4.158 The Commission has specified the following methodology for calculation of O&M expenses for the Control Period –

"5.4 The Licensee shall submit the O&M expenses for the Control Period as prescribed in Multi Tear Tariff filing procedure. The O&M expenses for the Base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the Licensees, estimates of the actuals for the Base Year, prudence check and any other factor considered appropriate by the Commission.

5.5 O&M expenses permissible towards ARR for each year of the Control Period shall be determined using the formula detailed below:

(a) $O\&M_n = (R\&M_n + EMP_n + A\&G_n) * (1 – X_n)$

Where,

(i) $R\&M_n = K * GFA_{n-1}$;

(ii) $EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX)$;

(iii) $INDX = 0.55 * CPI + 0.45 * WPI$;

(iv) *X_n is an efficiency factor for n^{th} year. Value of X_n shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;*

(v) *EMP_n – Employee Costs of the Licensee for the n^{th} year;*

(vi) *$A\&G_n$ – Administrative and General Costs of the Licensee for the n^{th} year; and*

(vii) *$R\&M_n$ – Repair and Maintenance Costs of the Licensee for the n^{th} year.*

Where,

'K' is a constant (could be expressed in %). Value of K for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor considered appropriate by the Commission;

INDX - Inflation Factor to be used for indexing. Value of INDX shall be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding five years before the base year."

4.159 The Commission has used the methodology as specified in the MYT Regulations 2011 for calculation of O&M expenses for the Control Period. The same is detailed in the following sections.

Base year and Inflation Factor

4.160 As per the MYT Regulations 2011, the O&M expenses for the Base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the Licensees, estimates of the actuals for the Base Year, prudence check and any other factor considered appropriate by the Commission.

4.161 The Commission directed the Petitioner to submit head wise break-up of the employee, R&M and A&G expenses for FY 2006-07 to FY 2011-12 and has examined the same for determination of the base year expenses. The value of the Employee, R&M and A&G expenses for the Base Year as arrived at by the Commission are detailed in the respective sections dealing with these expenses.

4.162 As per Clause 5.5 of the MYT Regulations 2011, the inflation factor (INDX) to be used for projection of employee and A&G expenses shall be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding five years before the base year.

4.163 The CPI and WPI values for calculation of the inflation factor are given in the table below.

Table 76: Actual CPI and WPI

Year	CPI (Overall)	% Growth	WPI (Overall)	% Growth
2005-06	117.12		104.47	
2006-07	125.00	6.73%	111.35	6.59%
2007-08	132.75	6.20%	116.63	4.74%
2008-09	144.83	9.10%	126.02	8.05%
2009-10	162.75	12.37%	130.82	3.81%
2010-11	179.75	10.45%	143.33	9.56%
Average		8.97%		6.55%

Source: Ministry of Labour Website, http://labourbureau.nic.in and Ministry of Commerce and Industry Website, http://eaindustry.nic.in/

4.164 Based on these values, the Commission has calculated the annual growth in values of CPI (overall) for Industrial Workers and WPI (overall) for the period FY 2006-07 to FY 2010-11 and has considered the same for determination of indices during the base year and the Control Period. The summary of the same is provided in the table below.

Table 77: Projected CPI and WPI during the Control Period

Year	CPI (Overall)	Projected Growth in CPI	WPI (Overall)	Projected Growth in WPI
2011-12 (Base Year)	195.87	8.97%	152.71	6.55%
2012-13	213.44	8.97%	162.72	6.55%

Year	CPI (Overall)	Projected Growth in CPI	WPI (Overall)	Projected Growth in WPI
2013-14	232.59	8.97%	173.37	6.55%
2014-15	253.45	8.97%	184.73	6.55%

4.165 The Commission has determined the inflation factor for the nth year (INDXn) using a weighted average of CPI and WPI as specified in the MYT Regulations 2011. The inflation factor is then used to calculate the inflation factor for each year (INDXn/ INDXn-1) as shown in the table below.

Table 78: Inflation factor for the Control Period approved by the Commission

Year	Index (Consolidated)	Escalation Factor
2010-11	163.36	
2011-12	176.45	1.08
2012-13	190.62	1.08
2013-14	205.94	1.08
2014-15	222.53	1.08

Employee Expenses

Petitioner's Submission

4.166 The Petitioner has submitted that the proposed methodology of allowance of employees expenses based on the formula of EMPn-1*INDX only addresses the increase required in employees cost due to inflation but fails to address the increase required on account of certain other factors.

4.167 There are two structures of employees with the Petitioner i.e. i) FRSR Structure – comprising of the employees who were transferred from erstwhile Delhi Vidyut Board. It has submitted that any increase in the salary of FRSR employees is uncontrollable in the hands of licensee. ii) Non-FRSR Structure – The formula in MYT Regulations, 2011 of allowance in increase in the salary does not address the increase required for the factors beyond average inflation like:

(a) current inflation;

(b) career growth/promotions;

(c) increase required in proportion to increase in consumers.

4.168 The Petitioner has projected the employee expenses for FRSR employees for the Control Period by estimating the employee expenses of FY 2011-12 (based on current trend of increase in salary announced by GoNCTD in the past) and has projected the same considering the expected increments in salary and retirement of employees.

4.169 It has projected the employee expenses for the non-FRSR employees for the Control Period by estimating the base employee expenses for FY 2011-12 at Rs 168.75 Cr and escalating the same by the projected inflation rate (on a rolling basis), impact of promotions and impact of increase in consumer base.

4.170 The total employee expenses for the Control Period as projected by the Petitioner including salaries of FRSR and non-FRSR employees, pension payments to SVRS employees and capitalization of employee expenses at 10% of employee cost are shown in the table below.

Table 79: Employee expenses for Control Period submitted by the Petitioner (Rs Cr)

	FY 2012-13	FY 2013-14	FY 2014-15
FRSR Structure Employees	158.84	162.03	164.19
Non FRSR Structure Employees	231.43	317.72	426.39
Employee Cost	**390.27**	**479.75**	**590.58**
Pension	5.20	4.01	3.14
Total Employee Cost	**395.47**	**483.76**	**593.72**

4.171 The Petitioner has submitted vide letter dated May 08, 2012 the allocation of the net employee cost into Wheeling and Retail Supply business as follows:

(a) The Petitioner has first allocated the employee cost projected for FY 2012-13 to FY 2014-15 into the different employee functions in the following ratio.

Table 80: Allocation of Employee Cost into different functions

Functions	Allocation
Administration	38.02%
System	7.63%
Direct Districts	36.22%
Street Light	0.80%
Billing & Metering	14.04%
Commercial/Enforcement	0.00%
Bonus (Exgratia)	0.00%
Gratuity	0.00%
VSS/ VRS	3.28%
Cenpeid	0.01%

(b) The Petitioner has, thereafter, allocated the employee cost apportioned to different employee functions between Wheeling Business and Retail Supply Business in the following manner:

Table 81: Allocation of Employee Cost between Wheeling & Retail Supply Business

Functions	Wheeling	Retail Supply
Administration	60%	40%
System	100%	0%
Direct Districts	100%	0%
Street Light	0%	100%
Billing & Metering	0%	100%

Functions	Wheeling	Retail Supply
Cenpeid	60%	40%

Commission's Analysis

4.172 The Commission has determined employee expenses of the Petitioner for the Control Period in line with the formula specified in the MYT Regulations 2011 –

$EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX)$;

Where,

$INDX = 0.55 * CPI + 0.45 * WPI$;

EMP_n – Employee Costs of the Licensee for the n^{th} year;

INDX - Inflation Factor to be used for indexing. Value of INDX shall be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding five years before the base year."

4.173 As per the MYT Regulations 2011, the O&M expenses for the Base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the Licensees, estimates of the actuals for the Base Year, prudence check and any other factor considered appropriate by the Commission.

4.174 In order to arrive at the Base Year expenses for the current Control Period the Commission directed the Petitioner to submit the head-wise details of employee expenses for FY 2006-07 to FY 2011-12 and has examined the same for determination of the base employee expenses. The Petitioner was also directed to submit reasons with justification for hike/fluctuations in the employee costs during FY 2006-07 to FY 2011-12.

4.175 The Commission is of the view that the expenses pertaining to FY 2011-12 seem to be abnormally high in some of the DISCOMs as compared to the trend of the expenses observed during the previous financial years. Hence the projections have been made by considering the trend of expenses for the period from FY 2007-08 to FY 2010-11.

4.176 The Petitioner was further directed to identify any arrears and component wise impact of the 6th Pay Commission on employee cost from FY 2006-07 onwards. The Petitioner submitted impact of the 6th Pay Commission from FY 2006-07 to FY 2009-10 and submitted that no arrears were included in the employee cost for FY 2010-11 and FY 2011-12 vide letter dated May 24, 2012.

4.177 The Commission calculated the employee expenses for the preceding financial years after deducting the Pay Commission Arrears and including the component wise impact of the 6th Pay Commission as submitted by the Petitioner to analyze the trend in the employee expenses.

4.178 The Commission also asked the Petitioner to clarify whether the expenses incurred on the generation business of TPDDL were included in the O&M expenses submitted by it. The Petitioner, vide letter dated June 20, 2012, submitted that the employee expenses of generation – Rithala/solar plants amounting to Rs.0.45 Cr in FY 2010-11 were inadvertently not removed from the base cost. The Commission removed these expenses from the expenses of the respective years as per the additional information submitted by the Petitioner.

4.179 The Commission also subtracted the SVRS pensions from the total employee expenses for analyzing the trend in employee expenses. The same shall be trued up for each year based on the actual SVRS pensions paid out.

4.180 Further, the Commission noticed that there was an 'Incentive' component for CTC structure employees on account of AT&C loss reduction programme of the licensee. As per the additional information submitted by the Petitioner vide letter dated June 22, 2012, the Incentive on account of the AT&C loss reduction programme was equal to Rs 1.60 Cr in FY 2010-11. The Commission is of the view that since the Petitioner is already getting incentive separately for reducing AT&C losses, the same cannot be considered again as part of the employee expenses for projection. Therefore, the Commission has removed these for estimating the base year employee expenses.

Table 82: Revised Employee Expenses (Rs Cr.) calculated by the Commission

Particulars	2006-07	2007- 08	2008-09	2009-10	2010-11
Gross Employee cost submitted by the Petitioner	166.58	157.85	196.93	293.59	274.85
Less: Arrears paid out	-	-	22.90	89.76	-
Add: Impact of 6th Pay Commission	20.19	21.78	30.34	36.23	-
Less: Incentive for AT&C losses in CTC structure	-	-	-	-	1.6
Less: Employee expenses on Rithala plant					0.45
Less: SVRS Benefits incl. Medical-FRSR, Pension, LTA retirees, VSS exp written off, Group insurance VSS	37.20	9.47	8.34	14.18	8.10
Normalized employee expenses	149.57	170.17	196.04	225.88	264.70

4.181 The Commission also analysed the year-on-year increase in the normalized employee cost arrived at after making the above adjustments for FRSR and non-FRSR employees separately.

Table 83: Analysis of Revised Employee Expenses (Rs Cr.) Calculated by the Commission

Particulars	2006-07	2007- 08	2008-09	2009-10	2010-11
Normalized FRSR employee cost	94.10	100.54	114.69	129.53	144.37
Normalized Non-FRSR employee cost	55.47	69.63	81.35	96.35	120.33
Total net employee expenses	149.57	170.17	196.04	225.88	264.70
YoY increase total employee cost		14%	15%	15%	17%

4.182 The Commission also calculated the employee cost per unit of sales and employee cost per consumer served for FY 2006-07 to FY 2010-11 for the Petitioner to take into account the impact of sales and number of consumers on the employee cost of the Petitioner. The Commission also compared the same with the employee cost per unit of sales and employee cost per consumer served for other DISCOMs. The results of the comparison are shown in the table below.

Table 84: Employee Cost per unit of sales as calculated by Commission

	FY 2006-07	FY 2007- 08	FY 2008-09	FY 2009-10	FY 2010-11	*% Inc*
TPDDL	0.34	0.34	0.38	0.39	0.41	20%
BYPL	0.43	0.42	0.44	0.41	0.44	3%
BRPL	0.28	0.29	0.3	0.28	0.29	5%
Average Increase						*9%*

Table 85: Employee Cost per consumer served

	FY 2006-07	FY 2007- 08	FY 2008-09	FY 2009-10	FY 2010-11	*% Inc*
TPDDL	1695	1844	1896	1975	2180	29%
BYPL	1454	1509	1658	1605	1742	*20%*
BRPL	1509	1592	1528	1455	1527	1%
Average Increase						*17%*

4.183 As can be seen from the above tables the increase in employee cost of the Petitioner, between FY 2006-07 and FY 2010-11, measured in terms of both employee cost per unit of sales and employee cost per consumer served, is the highest in case of the Petitioner; and is even higher than the average increase in the employee cost per unit of sales and employee cost per consumer served for the three DISCOMs.

4.184 The Commission has benchmarked the employee cost of the Petitioner with other licensees in Delhi to arrive at the employee cost of the Base Year using the methodology as detailed below.

4.185 In case the increase in employee cost per unit of sales for a licensee is greater than the average increase in employee cost per unit of sales across the three DISCOMs, the employee cost per unit of sales for FY 2010-11 is worked out by applying the average increase in employee cost per unit of sales on the employee cost per unit of sales of FY 2006-07. The same is multiplied with sales for FY 2010-11 to estimate the employee expenses for FY 2010-11. In case the increase in employee cost per unit of sales for a licensee is less than the average increase in employee cost per unit of sales across the three DISCOMs, the actual employee expenses for FY 2010-11 is used to estimate the employee expenses for FY 2010-11. (A)

4.186 In case the increase in employee cost per consumer for a licensee is greater than the average increase in employee cost per consumer across the three DISCOMs, the employee cost per consumer for FY 2010-11 is worked out by applying the average increase in employee cost per consumer on the employee cost per consumer of FY 2006-07. The same is multiplied with the number of consumer for FY 2010-11 to estimate the employee expenses for FY 2010-11. In case the increase in employee cost per consumer for a licensee is less than the average increase in employee cost per unit of sales across the three DISCOMs, the actual employee expenses for FY 2010-11 is used to estimate the employee expenses for FY 2010-11. (B)

4.187 The employee expenses for FY 2010-11 are calculated by taking a weighted average (using 50% weights) of the employee expenses estimated in step (A) and (B).

4.188 The employee expenses for the Base Year i.e. FY 2011-12 are calculated by escalating employee expenses for FY 2010-11 by the inflation factor arrived at in Table 78.

4.189 The employee cost for the Base Year as calculated for the Petitioner using the above methodology is given the table below:

Table 86: Estimation of Base Employee Expenses

Particulars	UoM	
Employee Expenses per unit sales - Actual in FY 2006-07	Rs/unit sales	0.34
Employee Expenses per consumer - Actual in FY 2006-07	Rs/consumer	1695
Increase considered in Employee Expenses per unit sales	%	9%
Increase considered in Employee Expenses per consumer	%	17%
Employee Expenses per unit sales (A) - Estimated	Rs/unit sales	0.38
Employee Expenses per consumer (B) - Estimated	Rs/consumer	1975
Employee Expenses (calculated on basis of A) (C)	Rs Cr	240.25
Employee Expenses (calculated on basis of B) (D)	Rs Cr	239.84
Estimated Base Employee Expenses (weighted average of C and D)	Rs Cr	240.05
Inflation factor		1.08
Employee Expenses for the base year (FY 2011-12)	**RS Cr**	**259.28**

4.190 For the calculation of the employee cost for each year of the Control Period the Commission has escalated the employee cost for the Base Year, determined as described above, by the inflation factor mentioned in Table 78.

4.191 The capitalisation of employee expenses has been discussed later in this Tariff Order in the section “Capitalisation of Expenses and Interest charges”.

4.192 The approved gross employee expenses of the Petitioner for each year of the Control Period are as shown below:

Table 87: Gross Employee Expenses approved by the Commission (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Gross Employee Expenses	280.10	302.62	326.99
Less: Capitalisation	28.01	30.26	32.70
Net Employee Expense	**252.09**	**272.36**	**294.29**

4.193 The capitalisation of employee expenses has been discussed later in this Tariff Order in the section “Capitalisation of Expenses and Interest charges”.

SVRS Related Expenses

4.194 In the MYT petition, the Petitioner has proposed yearly payments towards terminal benefits and pension liabilities arising to those who opted for VRS/VSS formulated by the Petitioner. The Commission has already discussed the treatment of VRS/VSS pension related expenses in the truing up section. The Commission follows the same approach, as discussed in the truing up section for the treatment of such expenses during the previous Control Period.

4.195 The estimated pension liability for the Control Period submitted by the Petitioner is shown below.

Table 88: Proposed SVRS Pension Expenses (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
SVRS Pension	**5.20**	**4.01**	**3.14**

4.196 The Commission has analyzed the submissions made by the Petitioner and provisionally approves the SVRS pension at the same level as was proposed by the Petitioner for the Control Period.

Table 89: Approved SVRS Pension Expenses (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
SVRS Pension	**5.20**	**4.01**	**3.14**

4.197 The Commission provisionally allows the monthly pension provisionally subject to the outcome of the Tribunal Order with the condition that any refund/relief provided on this account to the Petitioner by the Trust will be available for adjustment in the future employee expenses.

Allocation into Wheeling and Retail Supply

4.198 The Commission has analyzed the allocation statement of employee expenses into different employee functions submitted by the Petitioner. The Commission has observed that the Petitioner has allocated the employee expenses to VSS/Pension related expenses as well. Since, the Commission has considered VSS related expenses separately; it has not included the same in the employee expenses approved above for the Control Period. Thus, for allocating the net employee expenses into different employee functions, the Commission has recast the allocation statement proposed by the Petitioner in the same proportion as proposed by the Petitioner excluding VSS related expenses. The summary of the same is given below.

Table 90: Approved Allocation of Employee Cost into different functions

Functions	Allocation
Administration	39.31%
System	7.89%
Direct Districts	37.45%
Street Light	0.83%
Billing & Metering	14.52%
Commercial/Enforcement	0.00%
Bonus (Ex-gratia)	0.00%

Functions	Allocation
Gratuity	0.00%
Cenpeid	0.01%
Total	**100%**

4.199 Thereafter, the Commission has allocated the employee cost apportioned to different employee functions between Wheeling Business and Retail Supply Business based on the allocation statement submitted.

4.200 The Commission has also allocated the pension liabilities approved for the Control Period in the proportion of net employee cost allocated to the respective businesses.

4.201 The summary of employee cost approved by the Commission for Wheeling and Retail Supply business is shown below.

Table 91: Approved Allocation of Employee Cost (Rs. Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Net Employee Cost (Wheeling)	173.76	187.73	202.85
Pension liability (Wheeling)	3.12	2.41	1.88
Total – Wheeling	**176.88**	**190.14**	**204.73**
Net Employee Cost (Retail	78.33	84.62	91.44
Pension liability (Retail Supply)	2.08	1.60	1.26
Total – Retail Supply	**80.41**	**86.23**	**92.70**

Administrative and General Expenses

Petitioner's Submission

4.202 The Petitioner submitted that the methodology adopted by the Commission in MYT Regulations, 2011 only takes into account inflation and does not address other factors for increase in A&G expenses which are not in control of the Commission – like statutory implications such as increase in minimum wage rate under the Minimum Wages Act, inflation, increase in number of consumers etc.

4.203 The Petitioner has projected the A&G expenses for FY 2011-12 at Rs 54.92 Cr by considering the base A&G expenses for FY 2010-11 after taking into account the impact of increase in minimum wages and increase in consumer base during the year.

4.204 The base expenses so arrived at for FY 2011-12 have been escalated by the projected inflation rate, and after taking into account the impact of increase in consumer base, to arrive at the A&G expenses for the Control Period. The A&G expenses for the Control Period as projected by the Petitioner are shown in the table below.

Table 92: A&G expenses for Control Period (Rs Cr) submitted by the Petitioner

		FY 2012-13	FY 2013-14	FY 2014-15
Estimated Base expense	A	54.92	63.37	73.14
Increase in consumers	B	7.50%	7.50%	7.50%
Impact of consumer	C = A*B	3.09	3.56	4.11

		FY 2012-13	FY 2013-14	FY 2014-15
Inflation	D	9.76%	9.80%	9.39%
Impact of Inflation	E = A*D	5.36	6.21	6.87
Total A&G Expenses	F = A+C+E	**63.37**	**73.14**	**84.13**

4.205 The Petitioner has also submitted the allocation of A&G expenses into Wheeling and Retail Supply business. While allocating the A&G expenses the Petitioner has allocated certain heads of A&G expenses completely to Retail Supply and the balance A&G expenses in the ratio of 60:40 to Wheeling and Retail Supply business respectively. The Summary of the allocation statement proposed by the Petitioner is shown below.

Table 93: Statement of Allocation of A&G Cost between Wheeling & Retail Supply Business

Functions	Wheeling	Retail Supply
Cash Pick Up	0%	100%
Bill Distribution	0%	100%
Legal	0%	100%
Licence Fee	0%	100%
Brokerage Commission	0%	100%
Freight	0%	100%
Credit Card	0%	100%
Disconnection Exp	0%	100%
Computer Expenses	0%	100%
Rest of the Cost	**60%**	**40%**

4.206 The Petitioner has also submitted the head-wise break-up of the A&G expense for the Control Period, as follows:

Table 94: Head-wise Allocation of A&G Expense (%) to total A&G Expense

Functions	Allocation
Cash Pick Up	1%
Bill Distribution	8%
Legal	10%
Licence Fee	3%
Brokerage Commission	3%
Freight	2%
Credit Card	1%
Disconnection Exp	4%
Computer Expenses	10%
Advertisement Expenses	5%
Rest of the Cost	53%

4.207 The summary of the proposed A&G cost, allocated to Wheeling and Retail Supply business submitted by the Petitioner is as follows:

Table 95: Proposed Allocation of A&G Expenses (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Wheeling	19.72	22.76	26.19
Retail Supply	43.64	50.38	57.94
Total	**63.37**	**73.14**	**84.13**

Commission's Analysis

4.208 The Commission has determined A&G expenses of the Petitioner for the Control Period in line with the formula specified in the MYT Regulations 2011 –

$EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX);$

Where,

$INDX = 0.55 * CPI + 0.45 * WPI;$

EMP_n – Employee Costs of the Licensee for the n^{th} year;

INDX - Inflation Factor to be used for indexing. Value of INDX shall be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding five years before the base year."

4.209 In line with the approach followed by it for employee expenses, the Commission has considered the A&G expenses for FY 2006-07 to FY 2010-11 for estimation of base year expenses of the DISCOMs. The Commission has examined the detailed head wise break-up of A&G expenses for FY 2006-07 to FY 2010-11 and reasons for variation in the A&G sub-heads given by the Petitioner in the additional submissions made by it vide letter dated May 29, 2012 and June 22, 2012 for determination of the base A&G expenses.

4.210 The Petitioner submitted the A&G expenses excluding expenses on Foreign exchange fluctuation loss (net), Bad debts written off, Provision for doubtful debts/advances from the total A&G expenses. The Commission asked the Petitioner to clarify whether the expenses incurred on the generation business of TPDDL were included in the O&M expenses submitted by it. The Petitioner, vide letters dated March 30, 2012 and June 22, 2012, submitted that the A&G expenses of generation – Rithala/solar plants amounting to Rs. 0.12 Cr in FY 2010-11 were inadvertently not removed from the A&G cost. The Commission removed these expenses to compute the A&G expenses.

Table 96: Revised A&G Expenses (Rs Cr.) calculated by the Commission for the base year

Particulars	2006-07	2007- 08	2008-09	2009-10	2010-11
A&G expenses submitted by the Petitioner	29.94	32.92	35.48	44.39	47.23
Less: A&G cost incurred on Rithala Plant					0.12
Less: Interest on late payment	0.02	0.02	0.00		

Particulars	2006-07	2007- 08	2008-09	2009-10	2010-11
of taxes					
A&G Expenses	29.91	32.90	35.48	44.39	47.11

4.211 The Commission also calculated the A&G cost per unit of sales and A&G cost per consumer served for FY 2006-07 to FY 2010-11 for the Petitioner to take into account the impact of sales and number of consumers on the A&G cost of the Petitioner. The Commission also compared the same with the A&G cost per unit of sales and A&G cost per consumer served for other DISCOMs. The results of the comparison are shown in the table below:

Table 97: A&G Cost per unit of sales as calculated by Commission

	FY 2006-07	FY 2007- 08	FY 2008-09	FY 2009-10	FY 2010-11	% Inc
TPDDL	0.07	0.07	0.07	0.08	0.07	7%
BYPL	0.13	0.13	0.11	0.09	0.1	-26%
BRPL	0.1	0.1	0.1	0.07	0.09	-15%
Average Increase						-11%

Table 98: A&G Cost per consumer as calculated by Commission

	FY 2006-07	FY 2007- 08	FY 2008-09	FY 2009-10	FY 2010-11	% Inc
TPDDL	339	356	343	388	388	14%
BYPL	439	467	435	334	380	-13%
BRPL	561	554	483	339	459	-18%
Average Increase						-6%

4.212 As can be seen from the above tables, the increase in A&G cost of the Petitioner between FY 2006-07 and FY 2010-11, measured in terms of A&G cost per unit of sales and A&G cost per consumer served, was 7% and 14% respectively as compared to the average increase, across the three Discoms, of -11% in A&G cost measured in terms of A&G cost per unit of sales and -6% A&G cost per consumer served.

4.213 The Commission has benchmarked the A&G cost of the Petitioner with other licensees to arrive at the employee cost of the Base Year using the following methodology.

4.214 In case the increase in A&G cost per unit of sales for a licensee is greater than the average increase in A&G cost per unit of sales across the three DISCOMs, the A&G cost per unit of sales for FY 2010-11 is worked out by applying the average increase in A&G cost per unit of sales on the A&G cost per unit of sales of FY 2006-07. The same is multiplied with sales for FY 2010-11 to estimate the A&G expenses for FY 2010-11. In case the increase in A&G cost per unit of sales for a licensee is less than the average increase in A&G cost per unit of sales across the three DISCOMs, the actual A&G expenses for FY 2010-11 is used to estimate the A&G expenses for FY 2010-11. (A)

4.215 In case the increase in A&G cost per consumer for a licensee is greater than the average increase in A&G cost per consumer across the three DISCOMs, the A&G cost per consumer for FY 2010-11 is worked out by applying the average increase in A&G cost per consumer on the A&G cost per consumer of FY 2006-07. The same is multiplied with the number of consumer for FY 2010-11 to estimate the A&G expenses for FY 2010-11. In case the increase in A&G cost per consumer for a licensee is less than the average increase in A&G cost per unit of sales across the three DISCOMs, the actual A&G expenses for FY 2010-11 is used to estimate the A&G expenses for FY 2010-11. (B)

4.216 The A&G expenses for the FY 2010-11 are calculated by taking a weighted average (using 50% weights) of the A&G expenses estimated in step (A) and (B).

4.217 The A&G expenses for the Base Year i.e. FY 2011-12 are calculated by escalating A&G expenses for FY 2010-11 by the inflation factor mentioned in Table 78 .

4.218 The A&G cost for the Base Year as calculated for the Petitioner using the above methodology is given the table below.

Table 99: Estimation of Base A&G Expenses

Particulars	UoM	
A&G Expenses per unit sales - Actual in FY 2006-07	Rs/unit sales	0.07
A&G Expenses per consumer - Actual in FY 2006-07	Rs/consumer	339
Increase considered in A&G Expenses per unit sales	%	-11%
Increase considered in A&G Expenses per consumer	%	-6%
A&G Expenses per unit sales (A) - Estimated	Rs/unit sales	0.06
A&G Expenses per consumer (B) - Estimated	Rs/consumer	320
A&G Expenses (calculated on basis of A) (C)	Rs Cr	39.00
A&G Expenses (calculated on basis of B) (D)	Rs Cr	38.81
Estimated Base A&G Expenses (weighted average of C and D)	Rs Cr	38.90
Inflation Factor		1.08
A&G Expenses for FY 2011-12	**Rs Cr**	**42.02**

4.219 The Commission has calculated A&G expenses for each year of the Second Control Period by considering the revised A&G Expenses of the base year (FY 2011-12) as arrived above and has escalated the same as per the escalation factor mentioned in Table 78.

4.220 The capitalisation of A&G expenses has been discussed later in this Tariff Order in the section “Capitalisation of Expenses and Interest charges”.

4.221 The approved gross A&G expenses of the Petitioner for each year of the Control Period are as shown below.

Table 100: A&G expenses (Rs Cr.) approved by the Commission

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
A&G Expenses	45.40	49.05	53.00

Allocation into Wheeling and Retail Supply

4.222 For the purpose of allocating the A&G cost as approved above, the Commission has considered the following approach:

(a) The Commission has first allocated the A&G expenses approved into different heads, in the same proportion of value under the respective head to the total A&G expenses submitted by the Petitioner the respective year (Table 94).

(b) Thereafter, the Commission has allocated the expenses of each component into Wheeling and Retail Supply business based on the allocation statement submitted by the Petitioner (Table 93).

4.223 The Summary of the A&G cost approved by the Commission for Wheeling and Retail Supply business is shown below.

Table 101: Approved Allocation of A&G Cost (Rs. Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Wheeling	14.44	15.60	16.85
Retail Supply	30.96	33.45	36.14
Total	**45.40**	**49.05**	**53.00**

Repairs and Maintenance Expenses

Petitioner's Submission

4.224 The Petitioner has submitted that the methodology adopted by the Commission for fixing of R&M expenses in MYT Tariff Regulations, 2011 does not address certain factors which are not in control of the Petitioner – for example statutory implications arising such as increase in minimum wage rate under the Minimum Wages Act, inflation etc.

4.225 The Petitioner has submitted that taking average of R&M expenses of the past 5 years will not be true reflection of current costs which are required to provide service under current stringent performance standards prescribed by the Commission as well as this will not take care of statutory increases over the 5 years. Only preceding year (FY 2011-12) before the commencement of the Control Period will reflect the correct picture having impact of all past statutory increases.

4.226 The Petitioner has proposed that to take care of statutory increases in the past years, K factor should be determined based on ratio of estimated R&M expense to be incurred in FY 2011-12 vis-à-vis average Gross Fixed Assets subject to true up based on actual audited figures of FY 2011-12. Further, it has requested that impact of inflation should also be allowed along with the 'K' factor while allowing the expenses for the period FY 2012-13 to FY 2014-15.

4.227 TPDDL has projected the R&M expenses for the Control Period by estimating the base 'K' factor at 2.92% and escalating the same by the projected inflation rate to arrive at the adjusted 'K' Factor for FY 2012-13 to FY 2014-15 as shown in the table below.

Table 102: R&M expenses for Control Period (Rs Cr) submitted by the Petitioner

	FY 2012-13	FY 2013-14	FY 2014-15
Opening GFA	4032.66	4392.99	4828.47
K Factor	3.18%	3.49%	3.83%
R&M Expenses	128.22	153.31	185.02

4.228 The Petitioner has also submitted the allocation of total R&M expenses under different head and the allocation of these respective heads into Wheeling and Retail Supply business. The allocation statement proposed by the Petitioner is given in the tables below.

Table 103: Allocation of R&M Expenses into different R&M heads

Particulars	Allocation (%)
Stores & Spares	16.90%
Street Light	3.00%
Building	3.40%
Computer/Off Equip/Other	4.40%
Meter/Street Light	1.40%
Automatic Meter Reading Expenses	3.00%
Meter Reading Expenses	5.50%
Call Centre charges	2.60%
Others	**59.80%**

Table 104: Statement of Allocation of R&M Expenses between Wheeling & Retail Supply Business

Particulars	Wheeling	Retail Supply
Stores & Spares	100%	0%
Street Light	0%	100%
Building	60%	40%
Computer/Off Equip/Other	60%	40%
Meter/Street Light	0%	100%
Automatic Meter Reading Expenses	0%	100%
Meter Reading Expenses	0%	100%
Call Centre charges	0%	100%
Others	**60%**	**40%**

4.229 The table below summarises the proposed R&M Expenses submitted by the Petitioner for the Control Period.

Table 105: Proposed R&M Expenses for the Control Period (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
R&M Total	128.22	153.31	185.02
R&M – Wheeling	73.68	88.10	106.32
R&M – Retail Supply	54.54	65.21	78.70

Commission's Analysis

4.230 As per the MYT Regulations 2011, the Repairs and Maintenance (R&M) Expenses of the Petitioner for the Control Period are to be determined based on the following formula:

$R\&M_n = K * GFA_{n-1}$

Where,

R&Mn is Repair and Maintenance Costs of the Licensee for the nth year;

'K' is a constant (could be expressed in %).

Value of K for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Applicant's filing, benchmarking, approved cost by the Commission in past and any other factor considered appropriate by the Commission.

4.231 The Petitioner was asked to submit the head wise break-up of the R&M expenses for FY 2006-07 to FY 2011-12 and provide reasons for increase or decrease in various R&M sub-heads. The Commission examined the additional information submitted by the Petitioner vide letter dated May 29, 2012 and June 22, 2012 for determination of the R&M expenses for the base year.

4.232 The Commission asked the Petitioner to clarify whether the expenses incurred on the generation business of TPDDL were included in the O&M expenses submitted by it. The Petitioner, vide letters dated March 30, 2012 and June 20, 2012, submitted that the R&M expenses of generation – Rithala/solar plants amounting to Rs.0.95 Cr in FY 2010-11 and Rs. 28.94 Cr in FY 2011-12 were inadvertently not removed from the base cost. The Commission removed these expenses from the total expenses as per the additional information submitted by the Petitioner.

Table 106: Revised R&M Expenses (Rs Cr.) calculated by the Commission for the base year

Particulars	FY08	FY09	FY10	FY11	FY12
R&M expenses submitted by the Petitioner				86.20	116.15
Less: R&M cost incurred on Rithala Plant				0.95	28.94
Normalized R&M Cost	57.20	66.36	77.27	85.26	87.21

4.233 The Commission has calculated the actual 'K' factor observed for the Petitioner for each year from FY 2007-08 to FY 2011-12 considering the R&M expenses and the opening GFA for the year as approved by the Commission in its previous Tariff Orders. The R&M expenses and 'K' factor for each year from FY 2007-08 to FY 2010-11 are shown in the table below.

Table 107: 'K' factor as approved by Commission for FY 2006-07 to FY 2011-12

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Opening GFA (as approved by the Commission) (Rs Cr)	2043.23	2563.23	2963.23	3188.23	3388.23
Total R&M Expenses (Rs Cr)	57.20	66.36	77.27	85.26	87.21
K Factor (on approved GFA)	2.80%	2.59%	2.61%	2.67%	2.57%

4.234 The Commission observed that the 'K'-factor for FY 2007-08 was higher than the average 'K' from FY 2008-09 to 2011-12 and an outlier relative to the trend. Therefore, the Commission has determined the value of 'K' factor for the Control Period on the basis of the average K factor observed for the Petitioner during FY 2008-09 to FY 2011-12. The Commission has thus decided to allow the value of 'K' factor at 2.61% for each year of the Control Period.

4.235 The Commission has determined the R&M Expenses for each year of the Control Period, considering the opening level of GFA as approved by the Commission for each year of the Control Period and the 'K' factor of 2.61% as shown in Table 108 below.

4.236 The summary of R&M Expenses approved by the Commission for the Control Period is as shown below.

Table 108: R&M Expenses (Rs Cr) approved by the Commission

Particulars	FY 2012-13	FY 2013-14	FY 2015-16
Opening GFA (as approved by Commission)	3657.23	3858.11	4078.11
K Factor (%)	2.61%	2.61%	2.61%
R&M Expenses	**95.52**	**100.77**	**106.51**

Allocation into Wheeling and Retail Supply

4.237 For the purpose of allocating the R&M cost approved above, the Commission has considered the following approach:

(a) The Commission has first allocated the total R&M expenses approved for each year of the Control Period under different heads of the R&M expenses based on the allocation statement provide by the Petitioner (Table 103).

(b) Thereby, the Commission has allocated the expenses under each head into Wheeling and Retail Supply business based on the allocation statement submitted by the Petitioner (Table 104).

4.238 The Summary of the R&M expenses approved by the Commission for Wheeling and Retail Supply business is shown below.

Table 109: Approved Allocation of R&M Expenses (Rs. Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
R&M – Wheeling	54.89	56.46	59.68
R&M - Retail Supply	40.63	44.30	46.83
Total	**95.52**	**100.77**	**106.51**

4.239 The petitioner has requested the Commission to increase the 'K factor' based on the inflation index for every subsequent year of the Control Period. However, the Commission is of the view that as the percentage of newer asset to the total asset base of the petitioner increases, the R&M expenses of the petitioner shall reduce as there will be no requirement of expenses on repair and maintenance for the newer asset in the initial years. The Commission therefore rejects the petitioner's submission and has considered constant K factor for the entire Control Period.

Efficiency Factor

Petitioner's Submission

4.240 The Petitioner has submitted that it had been assigned a target of 13% AT&C loss level for the FY 2011-12 and it has further proposed to achieve the target AT&C loss level of 12.75% level in FY 2012-13. This would be a challenge for it. The sustenance of the AT&C loss level achieved and further reduction requires a certain amount of expenditure to be incurred while the Commission is allowing O&M Expenses on normative basis which are further reduced by an efficiency factor. This results in an adverse impact on the assured ROE of the petitioner as actual expenses are in higher range.

4.241 Further, though the Petitioner has claimed an increase in Employees cost and A&G expenses with respect to increase in consumer base, but it would be noticed that this increase is not in direct proportion to increase in consumer base. Therefore the Petitioner has on its own prudently applied an efficiency factor and has therefore not applied the independent efficiency factor as required by the MYT Regulations, 2011.

Commission's analysis

4.242 As per the MYT Regulations 2011 for determination of distribution tariff, O&M expenses for the Control Period are to be determined using the following methodology:

"The O&M expenses for the nth year of the Control Period shall be approved based on the formula shown below:

(a) O&Mn = (R&Mn + EMPn + A&Gn) (1-Xn)*

Where Xn is an efficiency factor for nth year. Value of Xn shall be determined by the Commission in the MYT Tariff Order based on Licensee's filing; benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate."

4.243 The Commission is of the view that the O&M trajectory for the Control Period shall be decided considering an expected annual efficiency improvement factor.

4.244 The Commission has benchmarked the O&M expenses of the Petitioner against O&M expenses of the distribution licensees in other States. The Commission has observed that the O&M expenses of the Petitioner are higher than those of other distribution utilities. The summary of the relative comparison of O&M expenses of the Petitioner vis-a-vis the other distribution utilities for FY 2010-11 is shown below.

Figure 1: Comparative chart on O&M Expenses per unit of sale (Rs/Unit) across various Utilities

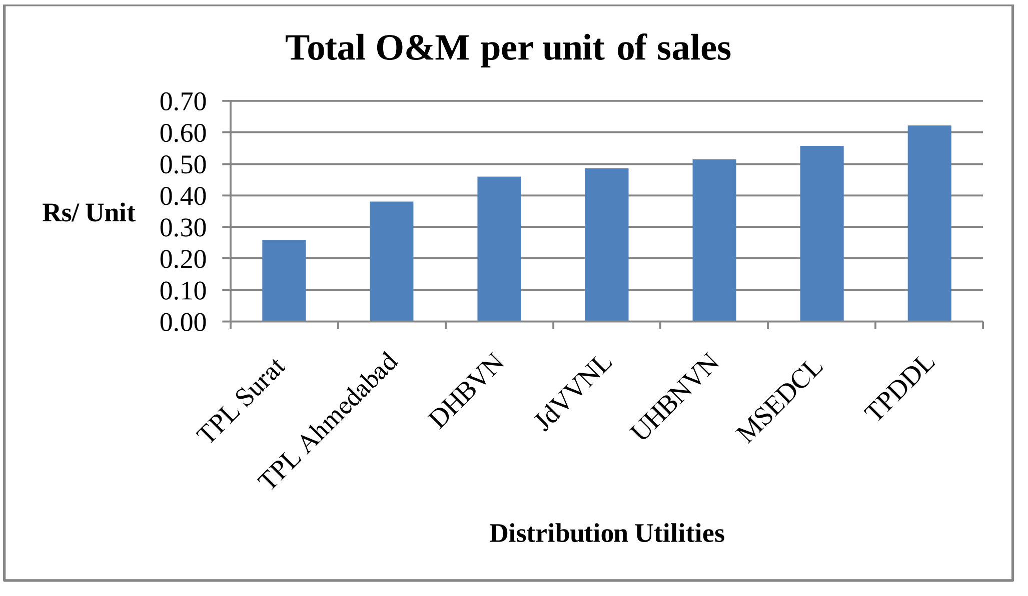
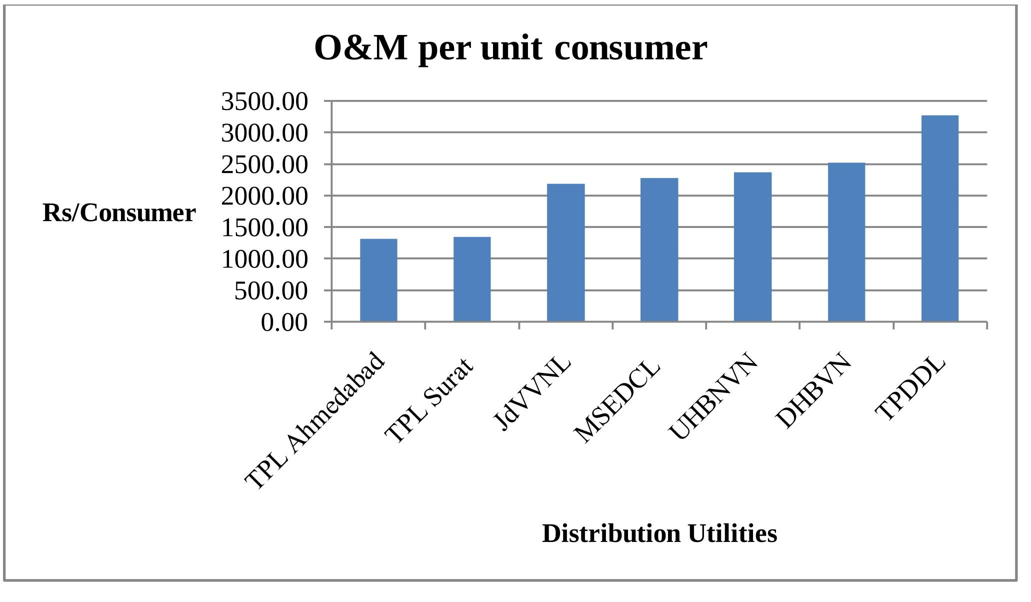


Figure 2: Comparative chart on O&M Expenses per consumer (Rs/Consumer) across various Utilities



4.245 The Commission expects the Petitioner to improve its performance considering the significant investments made during the Control Period. Hence, the Commission has determined the efficiency improvement factor as 2%, 3% and 4% for FY 2012-13, FY 2013-14 and FY 2014-15 respectively.

Total Operation & Maintenance Expenses

4.246 The summary of total O&M Expenses approved by the Commission for the Control Period is provided in the table below.

Table 110: O&M Expenses (Rs Cr.) approved by the Commission

Particulars	FY2012-13	FY2013-14	FY2014-15
Employee Cost	252.09	272.36	294.29
R&M Expenses	95.52	100.77	106.51
A&G Expenses	45.40	49.05	53.00
Total O&M expenses	393.00	422.17	453.80
Efficiency Improvement	2%	3%	4%
Add SVRS Pension	5.20	4.01	3.14
Net O&M Expenses	**390.34**	**413.51**	**438.79**

Capital Investment

Petitioner's Submission

4.247 The Petitioner has submitted that it has arrived at the capital expenditure plan based on the operational challenges, future load projections, Regulatory directions and specific requirements of consumer. It has categorised all capital expenditure under following benefit Centres;

(a) AT&C Loss reduction

(b) Reliability improvement

(c) Load growth

(d) Infrastructure development including administrative buildings

4.248 In addition to the above, it has also proposed expenditure to be incurred on Deposit Works which primarily include new 66 and 33 KV Grid substations, Mixed Load / Large Industrial connections, electrification works and shifting of services where full or part of the cost of such works is borne by the land owning agency or the consumer concerned.

4.249 The capital expenditure plan proposed by TPDDL for FY 2012-13 to FY 2014-15 is given in the table below:

Table 111: Detail-wise Proposed Capital Expenditure for FY 2012-13 to FY 2014-15 (Rs Cr)

	Scheme	FY 2012-13	FY 2013-14	FY 2014-15	Total
1	AT&C Loss Reduction Schemes				
1.1	Meter Replacement	27	28	38	93
1.2	HVDS Work	20	15	10	45
1.3	Replacement of LT Bare conductor to LT ABC				
1.4	LT ABC for Franchisee/ SPD				
	Subtotal for AT&C Loss Reduction	47	43	48	138
2	Reliability Improvement Schemes				
2.1	Automation Implementation	8	5	10	23
2.2	New Technologies(GIS, Communication, OMS & Smart Feeder)	12	21	18	51
2.3	Safety Related	8	8	8	24
2.5	11 kV Sick Cable Replacement	10	10	10	30
2.6	Testing Instruments	2	2	2	5
	Subtotal for Reliability Improvement	40	46	48	133
3	Load Growth Schemes				
3.1	EHV Works				
3.1.1	New Grid Substations excluding Deposit Works	81	95	92	268
3.1.2	66 & 33 kV Lines & Cables				
3.1.3	66 & 33 kV Addition/Augmentation of Bays/Transformers				
3.1.4	11 kV system Augmentation works	66	92	54	212
3.1.5	New Meters	48	49	51	148
3.1.6	LT Works	10	10	10	30
	Subtotal for Load Growth	205	246	207	658
4	Infrastructure Development Schemes				
4.1	Civil Infrastructure Projects	5	5	5	15
4.2	Information Technology	17	20	19	56
4.3	Administration support	10	10	10	30
	Subtotal for Infrastructure Development	32	35	34	101
Total for Non Deposit Works		**324**	**370**	**337**	**1,031**
Deposit Work		50	50	50	150
IDC		45	55	66	166
Total		**419**	**475**	**453**	**1,347**

4.250 The Petitioner has also proposed to fund the capital expenditure through internal accruals, domestic loans, consumer contribution and depreciation etc.

Commission's Analysis

4.251 The Commission provisionally allows Rs 220.00 Cr as the capital expenditure each for FY 2012-13, FY 2013-14 and FY 2014-15, as against the respective amount of Rs 419.32 Cr, Rs 475.23 Cr and Rs 453.14 Cr proposed by the Petitioner.

4.252 As per the MYT Regulations, 2011, the Commission would True-Up the capital investment for each year at the end of each year of the Control Period based on the actual capital investment carried out by the Petitioner.

4.253 The Commission would like to clarify that capital investment approved above is provisional and is subject to True-Up on the basis of actual capital investment made by the Petitioner. The Petitioner will require to take scheme wise approval for the capital investment.

Asset Capitalisation

Petitioner's Submission

4.254 The Petitioner has submitted the details of the capital works in progress for FY 2012-13 to FY 2014-15. The Petitioner has proposed to capitalize assets worth Rs 360.32 Cr, Rs 435.48 Cr and Rs 456.23 Cr in FY 2012-13, FY 2013-14 and FY 2014-15 respectively, as shown in the table below.

Table 112: Proposed CWIP for the Control Period (Rs Cr)

Particular	FY 2012-13	FY 2013-14	FY 2014-15
Opening CWIP	188.33	247.33	287.08
Investment During the Year	419.32	475.23	453.14
Capitalisation during the Year	360.32	435.48	456.23
Closing CWIP	247.33	287.08	283.98

Commission's Analysis

4.255 The Commission has analysed the available details to consider provisional capitalization for FY 2012-13 to FY 2014-15 and the same would be subjected to True-Up at the end of the respective years during the Control Period.

4.256 The Commission has determined the following capitalisation schedule for the investments proposed for FY 2012-13 to FY 2014-15. The Commission has capitalised in FY 2012-13 all the investments from years prior to FY 2012-13 that have not been capitalized fully. For fresh capital investment during the Control Period, the Commission has assumed 50% capitalisation in the year on investment and remaining 50% capitalisation in the next year.

Table 113: Approved CWIP for the Control Period (Rs Cr)

Particular	FY 2012-13	FY 2013-14	FY 2014-15
Opening CWIP	90.88	110.00	110.00
Investment During the Year	220.00	220.00	220.00
Capitalisation during the Year	200.88	220.00	220.00

Particular	FY 2012-13	FY 2013-14	FY 2014-15
- Investment capitalised out of opening CWIP for investments from FY 2007-08 onwards	90.88	110.00	110.00
- Investment capitalised out of fresh investment	110.00	110.00	110.00
Closing CWIP	110.00	110.00	110.00

4.257 The Commission would like to clarify that capitalisation approved above is provisional and is subject to True-Up on the basis of actual capital investment made and the schemes commissioned by the Petitioner.

Depreciation

Petitioner's Submission

4.258 The Petitioner has submitted detailed calculations of depreciation using asset-wise GFA, and the rates of depreciation as specified in the MYT Regulations, 2011.

4.259 The Petitioner, in the ARR petition for FY 2012-13 to FY 2014-15, has revised the opening balance of GFA for FY 2007-08 as Rs. 2,028.48 Cr from Rs 2,280.01 Cr submitted in the petition for the MYT Order. Further, it has also submitted additions to GFA of each year based on the revised capitalisation proposed for FY 2007-08 to FY 2011-12 which is Rs 296.45 Cr, Rs 474.28 Cr, Rs 403.95 Cr, Rs 394.17 Cr and Rs 435.34 Cr respectively.

4.260 Accordingly, the Petitioner has proposed Rs 4,032.66 Cr as the opening level of GFA for FY 2012-13 and Rs 360.32 Cr as the capitalisation during the year. For FY 2013-14 and FY 2014-15, capitalisation has been proposed at Rs 435.48 Cr and Rs 456.23 Cr respectively.

4.261 The summary of GFA as proposed by the Petitioner for the Control Period is provided in the table below.

Table 114: Proposed Gross Fixed Assets for FY 2007-08 to FY 2011-12 (Rs Cr)

Particular	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
GFA (Opening)	2,028.48	2,324.92	2,799.20	3,203.15	3,597.32
Addition	296.45	474.28	403.95	394.17	435.34
Reduction	-	-	-	-	-
GFA (Closing)	2,324.92	2,799.20	3,203.15	3,597.32	4,032.66

Table 115: Proposed Gross Fixed Assets for FY 2012-13 to FY 2014-15 (Rs Cr)

Particular	FY 2012-13	FY 2013-14	FY 2014-15
GFA (Opening)	4,032.66	4,392.99	4,828.47
Addition	360.32	435.48	456.23
Reduction	-	-	-
GFA (Closing)	4,392.99	4,828.47	5,284.70

4.262 For FY 2012-13 to FY 2014-15, the Petitioner has proposed the following depreciation gross of consumer contribution.

Table 116: Proposed Depreciation (Gross of Consumer Contribution) for FY 2012-13-FY 2014-15 (Rs Cr)

Particulars	Rate	FY 2012-13	FY 2013-14	FY 2014-15
Land & Land rights	0.00%	0.00	0.00	0.00
Building and Civil Works				
Office Building	1.80%	3.58	3.90	4.25
Housing Colony	1.80%	0.61	0.67	0.72
Temporary Structure	1.80%	0.08	0.09	0.09
Other Civil Works	1.80%	0.00	0.00	0.00
Plant & Machinery				
Power Transformers and kiosks	3.60%	14.40	16.06	17.93
Distribution transformers and kiosks	3.60%	12.56	13.61	14.79
Other sub Station apparatus	3.60%	1.98	2.16	2.37
Switchgears, Control gear & Protection	3.60%	24.97	27.41	30.15
Batteries	18.00%	1.19	1.29	1.41
Others		0.32	0.35	0.38
Line Cable Networks etc.				
Overhead lines up to 11kV	3.60%	33.62	36.70	40.15
Underground cables up to 11kV	2.57%	20.16	22.00	24.06
Others	6.00%	1.33	1.45	1.58
Lightening Arrestors (Station Type)	3.60%	0.78	0.85	0.92
Meters	6.00%	33.69	36.86	40.41
Vehicles	18.00%	6.43	7.05	7.76
Furniture & fixtures	6.00%	0.64	0.70	0.77
Office Equipments	6.00%	5.56	6.09	6.68
Total Depreciation		**161.89**	**177.24**	**194.44**

4.263 The Petitioner has computed depreciation based on the rates prescribed in the MYT regulations, 2011 then based on the average depreciation rate, depreciation has been adjusted for consumer contribution. The Petitioner has proposed Depreciation net of Consumer Contribution for FY 2012-13 to FY 2014-15 at Rs 141.52 Cr, Rs 154.28 Cr and Rs 169.55 Cr respectively, as shown in the table below:

Table 117: Proposed Depreciation (Net of Consumer Contribution) for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	**FY 2012-13**	**FY 2013-14**	**FY 2014-15**
Opening Assets (Net of Consumer Contribution)	3,541.17	3,824.07	4,203.09
Closing Assets (Net of Consumer Contribution)	3,824.07	4,203.09	4,615.45
Average GFA	3,682.62	4,013.58	4,409.27
Average Depreciation Rate Depreciation (including ADD) (Closing)	3.84%	3.84%	3.85%
Depreciation (Net of Consumer Contribution)	**141.52**	**154.28**	**169.55**

4.264 The Petitioner has also submitted (vide letter dated May 08, 2012) the approach followed for allocating each asset of the GFA and its respective depreciation cost into Wheeling and Retail Supply business. As per the Petitioner submission, Network assets up to the consumers' premises are considered as Wheeling Assets and beyond that the assets are considered as Retail Assets. Common Assets such as building, furniture etc. are considered for Wheeling and Retail Supply Business in the ration of 60: 40.

4.265 Based on the above approach for allocation of GFA (gross of Consumer Contribution) the Petitioner has submitted the break-up of GFA and depreciation (including AAD) into Wheeling and Retail Supply business. The summary of the same is shown in the table below.

Table 118: GFA and Depreciation (including AAD) proposed for Wheeling and Retail Business (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Total GFA (Closing)	4,393.0	4,828.4	5,284.7
GFA – Wheeling	3,638.8	3,999.1	4,376.6
GFA - Retail Supply	754.2	829.3	908.1
Total	211.09	227.22	258.82
Depreciation – Wheeling	162.54	175.09	198.96
Depreciation – Retail	48.55	52.14	59.86

Commission's Analysis

4.266 As per the MYT Regulations, 2011:

*"**Depreciation***

5.16 Depreciation shall be calculated for each year of the Control Period, on the amount of Original Cost of the Fixed Assets considered for calculation of the Regulated Rate Base of the corresponding year:

Provided that depreciation shall not be allowed on assets funded by consumer contribution (i.e., any receipts from consumers that are not treated as revenue) and capital subsidies/grants. Provision for replacement of such assets shall be made in the Capital Investment plan;

Provided further that the Licensee shall submit yearwise details of assets retired and disposed off, which shall be removed from the Original Cost of Fixed Assets;

Provided further that assets shall normally be not retired before completion of the useful life and the Licensee shall take prior approval of the Commission in case of retiring any asset before its useful life;

Provided further that the Licensee shall submit year-wise details of the assets which have completed its useful life….

4.267 The Commission, while allowing for GFA and depreciation for FY 2012-13 to FY 2014-15 has adopted the methodology as per the MYT Regulations, 2011. It may be noted that the Commission had revised the opening value of GFA for FY 2007-08 (as detailed in Chapter A3 of the Order dated August 26, 2011) as Rs 2043.23 Cr.

4.268 The Petitioner has projected opening GFA for FY 2012-13 as Rs 4032.66 Cr, while the Commission had approved the closing GFA for FY 2011-12 (opening GFA for FY

2012-13) in the Tariff Order dated August 26, 2011 as Rs 3657.23 Cr. The Commission is currently under process of conducting review of the capital expenditure, capitalisation and physical verification of the assets added by the Petitioner during FY 2006-07 – FY 2011-12. The capital expenditure and capitalisation carried out by the Petitioner during FY 2006-07 – FY 2011-12 shall be trued up after completion of this review.

4.269 The closing GFA proposed by the Petitioner for FY 2011-12 is much higher than closing GFA approved by the Commission in its Tariff Order dated August 26, 2011. The Commission had approved the capital investment and capitalisation for the Petitioner after approving the business plan of the Petitioner for each year of the previous MYT Control Period (FY 2007-08 – FY 2011-12). As the capital expenditure is a controllable parameter and Petitioner is required take approval of the Commission for incurring capital expenditure, the Commission in this Tariff Order has considered closing GFA approved by the Commission for FY 2011-12 in the Tariff Order dated August 26, 2011 as opening GFA for FY 2012-13. The Commission shall revise this figure after truing up of Capital expenditure and capital investment for the previous MYT Control Period (FY 2007-08 – FY 2011-12).

4.270 The Commission has approved the additions to the GFA for FY 2012-13 to FY 2014-15 equal to the approved capitalisation of Rs 200.88 Cr, Rs 220 Cr and Rs 220 Cr respectively.

4.271 The summary of opening and closing GFA for the previous Control Period (FY 2007-08 to FY 2011-12) and for the current Control Period (FY 2012-13 to FY 2014-15) are given in the tables below.

Table 119: GFA Approved by the Commission for previous Control Period (Rs Cr)

Particulars	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY 2011-12
Opening Balance of GFA	2043.23	2563.23	2963.23	3188.23	3388.23
Asset Additions	520.00	400.00	225.00	200.00	269.00
Reduction	0.00	0.00	0.00	0.00	0.00
Closing Balance of GFA	2563.23	2963.23	3188.23	3388.23	3657.23
Average GFA	**2303.23**	**2763.23**	**3075.73**	**3288.23**	**3522.73**

Table 120: GFA Approved by the Commission for current Control Period (Rs Cr)

Particulars	FY2012-13	FY2013-14	FY2014-15
Opening Balance of GFA	3657.23	3858.11	4078.11
Asset Additions	200.88	220.00	220.00
Reduction	0.00	0.00	0.00
Closing Balance of GFA	3858.11	4078.11	4298.11
Average GFA	**3757.67**	**3968.11**	**4188.11**

4.272 For capitalisation of consumer contribution during FY 2012-13 to FY 2014-15, the Commission has assumed that consumer contribution of any year is getting capitalised in proportion of the investment capitalisation for that year. The consumer contribution capitalised during the previous Control Period (FY 2007-08 – FY 2011-12) and current Control Period (FY 2012-13 to FY 2013-14) is shown in the table below:

Table 121: Consumer contribution and grants for previous Control Period (Rs. Cr)

Particulars	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY 2011-12
Opening Balance of consumer contribution and grants	92.68	234.36	323.70	359.78	380.65
Additions	141.68	89.34	36.08	20.87	30.90
Closing Balance of consumer contribution and grants	234.36	323.70	359.78	380.65	411.55
Average consumer contribution and grants	**163.52**	**279.03**	**341.74**	**370.22**	**396.10**

Table 122: Approved Consumer contribution and grants for current Control Period (Rs. Cr)

Particulars	FY2012-13	FY2013-14	FY2014-15
Opening Balance of consumer contribution and grants	411.55	447.83	491.83
Additions	29.40	33.38	23.72
Closing Balance of consumer contribution and grants	440.95	474.33	498.05
Average consumer contribution and grants	**426.25**	**457.64**	**486.19**

4.273 Based on the average of opening and closing value of assets approved, net of Consumer Contribution Grants (average of Opening and Closing balance) during the current Control Period and the rates of depreciation, specified in the MYT Regulations, 2011, the Commission has approved the depreciation for each year of the Control Period. Summary of depreciation approved for the Control Period is given in the following table:

Table 123: Approved Depreciation for the Control Period (Rs Cr.)

		FY 2012-13		FY 2013-14		FY 2014-15	
Particulars	**Rate**	**Avg. GFA Considered***	**Depreciation**	**Avg. GFA Considered***	**Depreciation**	**Avg. GFA Considered***	**Depreciation**
Land & Land rights	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Building and Civil Works							
-Office Building	1.80%	163.89	2.95	171.84	3.09	180.35	3.25
-Housing Colony	1.80%	24.07	0.43	25.36	0.46	26.73	0.48
-Temporary Structure	1.80%	3.13	0.06	3.29	0.06	3.47	0.06
Other Civil Works	1.80%	26.47	0.48	26.42	0.48	26.40	0.48
Plant & Machinery							
Power Transformers and kiosks	3.60%	567.23	20.42	587.68	21.16	609.81	21.95
Distribution transformers and kiosks	3.60%	17.90	0.64	31.53	1.13	45.77	1.65
Other sub Station apparatus	3.60%	51.35	1.85	53.62	1.93	56.05	2.02
Switchgears, Control gear & Protection	3.60%	600.67	21.62	631.11	22.72	663.72	23.89
Batteries	18.00%	4.36	0.79	4.63	0.83	4.91	0.88
Others	3.60%	0.47	0.02	0.82	0.03	1.19	0.04
Line Cable Networks etc.							
Overhead lines up to 11kV	3.60%	766.99	27.61	805.41	28.99	846.56	30.48
Underground cables up to 11kV	2.57%	557.51	14.33	589.82	15.16	624.31	16.04
Others	6.00%	6.93	0.42	7.83	0.47	8.79	0.53

		FY 2012-13		FY 2013-14		FY 2014-15	
Lightening Arrestors (Station Type)	3.60%	13.75	0.49	14.61	0.53	15.53	0.56
Communication equipment	6.00%	0.00	0.00	0.00	0.00	0.00	0.00
Meters	6.00%	396.62	23.80	420.50	25.23	445.96	26.76
Vehicles	18.00%	25.05	4.51	26.63	4.79	28.31	5.10
Furniture & fixtures	6.00%	17.80	1.07	18.23	1.09	18.70	1.12
Office Equipments	6.00%	87.22	5.23	91.15	5.47	95.36	5.72
Total		**3331.41**	**126.71**	**3510.46**	**133.62**	**3701.91**	**141.01**

**Average GFA considered is Average GFA available for depreciation (Average GFA – Average Consumer contribution and grants)*

Allocation into Wheeling and Retail Supply

4.274 For the purpose of allocating the GFA and Depreciation approved above, the Commission has considered the allocation statement submitted by the Petitioner. The summary of allocation statement proposed by the Petitioner is shown below.

Table 124: Statement of Allocation of GFA between Wheeling & Retail Supply Business

Particular	FY 2012-13	FY 2013-14	FY 2014-15	FY 2012-13 to FY 2014-15	
	Avg. GFA Considered (Rs Cr)*	Avg. GFA Considered	Avg. GFA Considered	Wheeling	Retail Supply
Land & Land rights	0.00	0.00	0.00	100%	0%
Building and Civil Works					
--Office Building	163.89	171.84	180.35	60%	40%
--Housing Colony	24.07	25.36	26.73	60%	40%
--Temporary Structure	3.13	3.29	3.47	60%	40%
Other Civil Works	26.47	26.42	26.40	60%	40%
Plant & Machinery					
Power Transformers and kiosks	567.23	587.68	609.81	100%	0%
Distribution transformers and kiosks	17.90	31.53	45.77	100%	0%
Other sub Station apparatus	51.35	53.62	56.05	100%	0%
Switchgears, Control gear & Protection	600.67	631.11	663.72	100%	0%
Batteries	4.36	4.63	4.91	100%	0%
Others	0.47	0.82	1.19	100%	0%
Line Cable Networks etc.					
Overhead lines up to 11kV	766.99	805.41	846.56	100%	0%
Underground cables up to 11kV	557.51	589.82	624.31	100%	0%
Others	6.93	7.83	8.79	100%	0%
Lightening Arrestors (Station Type)	13.75	14.61	15.53	100%	0%
	0.00	0.00	0.00		
Meters	396.62	420.50	445.96	0%	100%
Vehicles	25.05	26.63	28.31	60%	40%
Furniture & Fixtures	17.80	18.23	18.70	60%	40%
Other Office Equipments	87.22	91.15	95.36	60%	40%
Total	**3331.41**	**3510.46**	**3701.91**		

4.275 The summary of the GFA and Depreciation expenses approved by the Commission for Wheeling and Retail Supply business for FY 2012-13 to FY 2014-15 is shown below.

Table 125: Approved Allocation of GFA & Depreciation Expenses for FY 2012-13 to FY 2014-15 (Rs. Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Total GFA (Opening)	3657.23	3858.11	4078.11
GFA – Wheeling	3081.75	3249.04	3432.26
GFA - Retail Supply	575.48	609.07	645.85
Total Depreciation	126.71	133.62	141.01
Depreciation – Wheeling*	97.22	102.41	107.96
Depreciation – Retail Supply*	29.50	31.22	33.05

** Excluding AAD*

4.276 As per the MYT Regulation, 2011

"5.19 The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. Land is not a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset"

4.277 As asset-wise details are not available with the Commission, the Commission has decided to divide assets in year-wise asset blocks. The Commission has further, analysed the depreciation approved on the asset block since FY 2002-03 and checked if depreciation approved by the Commission on any of these annual block is reaching 90% till FY 2014-15. The analysis is shown in the table below:

Table 126: Depreciation allowed up to FY 2014-15 (Rs Cr)

Particulars	GFA (including CC)	Consumer Contribution Capitalised	GFA on which Depreciation is available	Total Depreciation to be allowed*	Total Depreciation allowed on the asset blocks till FY 2014-15
Opening GFA	1210.00	0.00	1210.00	1089.00	1040.28
Assets added in FY03	4.41	0.49	3.92	3.53	2.37
Assets added in FY04	230.81	25.67	205.14	184.63	108.34
Assets added in FY05	241.00	26.81	214.19	192.77	96.99
Assets added in FY06	157.00	17.46	139.54	125.58	52.68
Assets added in FY07	200.00	22.25	177.75	159.98	53.73
Assets added in FY08	520.00	141.68	378.32	340.49	107.33
Assets added in FY09	400.00	89.34	310.66	279.59	76.54
Assets added in FY10	225.00	36.08	188.92	170.03	39.44
Assets added in FY11	200.00	20.87	179.13	161.22	30.63
Assets added in FY12	269.00	30.90	238.10	214.29	31.70
Assets added in FY13	200.88	29.40	171.48	154.33	16.32
Assets added in FY14	220.00	33.38	186.62	167.96	10.66
Assets added in FY15	220.00	23.72	196.28	176.65	3.74

**90% of GFA net of Consumer Contribution*

<u>*Truing up of Depreciation for the Control Period (FY 2012-13 to FY 2014-15)*</u>

4.278 As per Regulation 4.21 (b) (ii) of MYT Regulations, 2011, Depreciation shall be trued up every year based on the actual capital expenditure and actual capitalisation vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission.

Accumulated Depreciation

Petitioner's Submission

4.279 The Petitioner has submitted the schedule of accumulated depreciation (inclusive of AAD) for FY 2012-13 to FY 2014-15, as shown in the table below.

Table 127: Proposed Accumulated Depreciation for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Opening Balance	1384.20	1574.92	1779.18
Depreciation during the year	141.52	154.28	169.55
Advance Against Depreciation (AAD)	49.20	49.98	64.38
Deletion during the year	-	-	-
Closing balance	**1574.92**	**1779.18**	**2013.11**

Commission's Analysis

4.280 For calculating the accumulated depreciation for the previous Control Period (FY 2007-08 to FY 2011-12), the Commission has considered the accumulated depreciation at the end of FY 2006-07, which includes the depreciation of Rs. 290 Cr, contained in the opening balance sheet of TPDDL according to the Transfer Scheme. For approving accumulated depreciation for the current Control Period (FY 2012-13 to FY 2014-15), the Commission has considered the accumulated depreciation at the end of FY 2011-12 that was approved in the Tariff Order dated August 26, 2011.

4.281 The accumulated depreciation for FY 2012-13 to FY 2014-15 is based on depreciation value approved by the Commission for this period (as mentioned in the above section) is as shown below.

Table 128: Approved Accumulated Depreciation for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Opening Balance	1269.48	1396.19	1529.81
Depreciation for the Year	126.71	133.62	141.01
Accumulated Depreciation	**1396.19**	**1529.81**	**1670.82**

Allocation into Wheeling and Retail Supply

4.282 For the purpose of allocating the value of Accumulated Depreciation approved above, the Commission has considered the allocation statement for GFA as submitted by the Petitioner (Table 124).

4.283 The summary of the GFA and Depreciation expenses approved by the Commission for Wheeling and Retail Supply business for FY 2012-13 to FY 2014-15 is shown below.

Table 129: Allocation of Accumulated Depreciation for FY 2012-13 to FY 2014-15(Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Wheeling			
Opening Balance	1040.09	1137.30	1239.71
Depreciation for the Year	97.22	102.41	107.96
Closing Balance	1137.30	1239.71	1347.67
Retail Supply			
Opening Balance	229.39	258.89	290.10
Depreciation for the Year	29.50	31.22	33.05
Closing Balance	258.89	290.10	323.15

Advance Against Depreciation

Petitioner's Submission

4.284 The Petitioner has requested the Commission to provide for advance against depreciation (AAD) during the Control Period (FY 2012-13 to FY 2014-15), by considering the actual debt repayment and the depreciation recovered during the year. The Petitioner has already included the AAD proposed for each year of the Control Period in the Depreciation expenses claimed for the respective years, as mentioned above.

4.285 The summary of AAD proposed by the Petitioner for FY 2012-13 to FY 2014-15 is detailed in the table below.

Table 130: Proposed AAD for Second Control Period (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
1/10th of the Loan(s)	216.98	243.51	272.37
Repayment of the Loan(s) as considered for working out Interest on Loan	190.72	204.27	233.93
Minimum of the Above	190.72	204.27	233.93
Less: Depreciation during the year	141.52	154.28	169.55
A	49.20	49.98	64.38
Cumulative Repayment of the Loan(s) as considered for working out Interest	903.13	1,107.40	1,341.33
Less: Cumulative Depreciation	853.94	1,057.42	1,276.95
B	49.20	49.98	64.38
AAD = min (A, B)/ zero if negative	**49.20**	**49.98**	**64.38**

Commission's Analysis

4.286 The Commission has calculated the advance against depreciation for each year of the Control Period, using the principles specified in the MYT Regulations, 2011 and considering the details of actual cumulative debt repayment and accumulated depreciation claimed by the Petitioner.

4.287 While calculating the AAD for the Control Period the Commission has considered the value of accumulated depreciation as net of the depreciation used for capital investment and working capital in the previous years (Rs. 378.97 Cr).

4.288 The Commission has approved no AAD for the Control Period (FY 2012-13 to FY 2014-15) as shown below:

Table 131: AAD approved by Commission for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
1/10th of the Loan(s)	185.64	198.53	203.97
Repayment of the Loan(s) as considered for working out Interest on Loan	168.12	179.95	183.42
Minimum of the Above	168.12	179.95	183.42
Less: Depreciation during the year	126.71	133.62	141.01
A	41.40	46.33	42.41
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	880.73	1060.68	1244.10
Cumulative Depreciation	1396.19	1529.81	1670.82
Depreciation Considered for Capex & WC in Previous years	378.97	378.97	378.97
Less: Cumulative Depreciation Considered for AAD	1017.22	1150.84	1291.85
B	-136.48	-90.16	-47.75
AAD = min (A, B)/ zero if negative	**0.00**	**0.00**	**0.00**

Truing up of AAD for the Control Period

4.289 The Commission is of the opinion that AAD determined above is dependent on the loans and depreciation approved by the Commission and since both these parameters are subject to True-Up at the end of the respective year of the Control Period, the Commission would True-Up the AAD as well at the end of the respective year of the Control Period.

Return on Capital Employed

4.290 The Return on Capital Employed (RoCE) for the Petitioner shall be determined as specified in the MYT Regulations, 2011. The RoCE can be determined only after determination of the Regulated Rate Base (RRB) for any particular year, and the Weighted Average Cost of Capital (WACC) for the year.

Regulated Rate Base

Petitioner's Submission

4.291 The Petitioner has estimated its Regulated Rate Base (RRB) for each year of the Control Period based on the formula specified in the MYT Regulations, 2011. The detailed working of the proposed RRB for FY 2012-13 to FY 2014-15,as submitted by the Petitioner, is tabulated below:

Table 132: Proposed RRB for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
RRB-Base Year			
Opening Balance of OCFA	4032.66	4392.99	4828.47
Opening Balance of Working Capital	458.98	521.40	603.89
Opening Balance of Accumulated Depreciation	1384.20	1574.92	1779.18
Opening Balance of Accumulated Consumer Contribution (in proportion of OCFA to total OCFA+CWIP+Stores)	491.49	568.92	625.37
RRB-for the year			
Investments in capital expenditure during the year	360.32	435.48	456.23
Depreciation for the year (including AAD)	190.72	204.27	233.93
Consumer Contribution, Grants etc. for the year	77.43	56.46	43.87
Change in working capital	62.42	82.49	78.03
RRB for the year	2724.47	2940.42	3195.05
Gross Interest	200.14	223.98	242.70
Average Debt	1700.01	1806.65	1944.79
Op. Bal of Debt	1665.15	1734.88	1878.41
Cl. Balance of Debt	1734.88	1878.41	2011.17
R_d – Percentage of Cost of Debt	11.77%	12.40%	12.48%
Average Equity	1011.21	1110.50	1229.21
Re- Percentage of Return on Equity	16%	16%	16%
WACC	13.35%	13.77%	13.84%
RoCE	**363.70**	**404.87**	**442.28**

Commission's Analysis

4.292 For the Control Period, the return allowed to the Petitioner shall be as per the methodology specified in the MYT Regulations, 2011. As per Regulation, the return for the year shall be determined by multiplying the weighted average cost of capital employed to the average of "Net Fixed Asset" for each year. Thus, the return allowed each year is determined based on the values of assets capitalised (net of depreciation and consumer contribution) in the respective year. The addition in equity/ free reserves and debt during each year of the Control Period is also to the extent of assets capitalised in that year.

4.293 The Commission has determined the amount of consumer contribution to be capitalised based on the submission made by the Petitioner and the asset capitalisation approved by the Commission. The summary of the same is given below.

Table 133: Approved Capitalised Consumer Contribution for FY 2012-13 to FY 2014-15(Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Opening Consumer Contribution (Not Capitalised)	9.09	20.31	13.07
Investment Approved	220.00	220.00	220.00
Consumer Contribution in the Investment	40.62	26.14	21.30
Asset Capitalisation	200.88	220.00	220.00
Asset Capitalised from Investment till last Year	*90.88*	*110.00*	*110.00*
Asset Capitalised from Investment in Current Year	*110.00*	*110.00*	*110.00*
Consumer Contribution capitalised	29.40	33.38	23.72
Closing Consumer Contribution (Not Capitalised)	20.31	13.07	10.65
Total Consumer Contribution capitalised during the Year	**29.40**	**33.38**	**23.72**

4.294 The summary of RRB approved by the Commission for the previous Control Period (FY 2007-08 to FY 2011-12) and current Control Period (FY 2012-13 to FY 2014-15) are provided in the tables below.

Table 134: Approved RRB for the previous Control Period (Rs Cr)

	Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
E	RRB (opening)	1238.93	1733.51	1964.31	2070.38	2173.57
F = G-H-I-J	Δ AB	298.78	217.51	85.71	68.85	119.57
G	Investments capitalized	520.00	400.00	225.00	200.00	269.00
H	Depreciation	79.54	93.15	103.21	110.28	118.54
I	AAD	0.00	0.00	0.00	0.00	0.00
J	Consumer Contribution	141.68	89.34	36.08	20.87	30.90
K	Change in WC	195.80	13.29	20.35	34.34	90.45
L = E+F+K	RRB (Closing)	1733.51	1964.31	2070.38	2173.57	2383.59
M = E+F/2+K	**RRB(i)**	**1584.12**	**1855.56**	**2027.53**	**2139.15**	**2323.80**

Table 135: Approved RRB for the current Control Period (Rs Cr)

	Particulars	FY 2012-13	FY 2013-14	FY 2014-15
E	RRB (opening)	2383.59	2440.34	2535.20
F = G-H-I-J	Δ AB	44.77	53.00	55.27
G	Investments capitalized	200.88	220.00	220.00
H	Depreciation	126.71	133.62	141.01
I	AAD	0.00	0.00	0.00
J	Consumer Contribution	29.40	33.38	23.72
K	Change in WC	11.99	41.87	42.34
L = E+F+K	RRB (Closing)	2440.34	2535.20	2632.81
M = E+F/2+K	**RRB(i)**	**2417.96**	**2508.71**	**2605.18**

Allocation into Wheeling and Retail Supply

4.295 The Petitioner has not submitted any allocation for RRB or RoCE into Wheeling and Retail Supply business. The Commission has allocated the RRB(i) approved for the Control Period considering the following:

(a) OCFA allocated as per GFA allocation submitted by the Petitioner (Table 124)

(b) Depreciation allocated as per GFA allocation submitted by the Petitioner (Table 124)

(c) Investment capitalised as per GFA allocation submitted by the Petitioner (Table 124)

(d) Consumer Contribution has been considered fully for Wheeling business

(e) Allocation of working capital is discussed in the subsequent section

4.296 The summary of RRB approved for Wheeling and Retail supply business for the Second Control Period is given below.

Table 136: Allocation of RRB for the First Control Period (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
RRB(i) – Wheeling	1738.72	1787.17	1841.56
RRB(i) – Retail Supply	**679.24**	**721.53**	**763.62**

Working Capital Requirement

Petitioner's Submission

4.297 The Petitioner has submitted the details of working capital requirement for each year of the Control Period and has considered the following components for calculating its working capital requirements:

(a) Receivables for two months towards tariffs & charges;

(b) Less Power Purchase Cost for one month;

(c) Less Transmission Charges for one month;

(d) Less Wheeling Charges for two month.

4.298 The working capital requirements of the Petitioner for FY 2012-13 to FY 2013-14 based on submissions made by TPDDL, are as provided in the table below.

Table 137: Proposed Working Capital for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Receivables(actuals/projected collection)	5154.76	5976.91	6703.65
Receivables equivalent to 2 months avg. billing	859.13	996.15	1,117.27

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Power Purchase Expense (net of rebate)	4052.67	4707.11	5224.21
1/12th of power purchase expense	337.72	392.26	435.35
Total Working Capital	521.40	603.89	681.92
Working Capital-Wheeling	126.42	144.93	168.25
Working Capital-Retail	394.99	458.96	513.67

Commission's Analysis

4.299 As per MYT Regulations,2011

"Working Capital

5.14 Working capital for wheeling business of electricity shall consist of

(a) *Receivables for two months of Wheeling Charges.*

5.15 Working capital for retail supply of electricity shall consist of

(b) *Receivables for two months of revenue from sale of electricity;*

(c) *Less: Power purchase costs for one month;*

(d) *Less: Transmission charges for one month."*

4.300 Based on the principles of the MYT Regulations, 2011, the Commission approves the working capital requirement for the Second Control Period (FY 2012-13 to FY 2014-15) for Wheeling and Retail Supply Business as shown in the tables below.

Table 138: Approved Working Capital for Wheeling Business for Second Control Period (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Wheeling Expense for the whole year	529.61	556.01	585.43
Wheeling expense for 2 months	88.27	92.67	97.57
Total Working Capital	**88.27**	**92.67**	**97.57**

Table 139: Approved Working Capital for Retail Supply Business for Second Control Period (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Receivables			
Annual revenues from Tariffs and Charges	4282.20	4740.20	5201.49
Receivables equivalent to 2 months average billing	713.70	790.03	866.92
Power Purchase expenses	3170.35	3605.02	3986.40
Less: 1/12th of power purchase expenses	264.20	300.42	332.20
Transmission Expense	361.60	340.50	373.68

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Less: 1/12th of transmission expense	30.13	28.38	31.14
Wheeling Expense	529.61	556.01	585.43
Less: wheeling expense for 2 months	88.27	92.67	97.57
Total Working Capital	**331.10**	**368.57**	**406.00**

4.301 Total working capital for FY 2012-13 to FY 2014-15 has been approved as shown in the table below:

Table 140: Allocation of Working Capital for the Control Period (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Working Capital Requirement – Wheeling	88.27	92.67	97.57
Working Capital Requirement – Retail Supply	331.10	368.57	406.00
Total Working Capital Requirement	**419.37**	**461.24**	**503.58**

Means of Finance

Petitioner's Submission

4.302 The Petitioner has considered funding of assets capitalised in the normative debt: equity ratio of 70:30 after utilizing the consumer contribution for funding capital investments as per the provisions of MYT Regulations, 2011.

Commission's Analysis

4.303 For the purpose of projecting future funding requirement, the Commission has considered normative debt-equity ratio of 70:30 on the asset capitalised each year after utilizing the consumer contribution. Since the funding for assets capitalised out of closing CWIP for FY 2006-07 has already been provided, to avoid any double counting the Commission has considered the asset capitalised out of new investments from FY 2007-08 onwards for determining the funding requirement. The summary of funding requirement for the Control Period based on the asset capitalisation approved by the Commission is provided in the table below.

Table 141: Approved Means of Finance for FY 2012-13 to FY 2014-15 (Rs Cr)

Means of finance	FY 2012-13	FY 2013-14	FY 2014-15
Consumer Contribution	29.40	33.38	23.72
Equity/Internal Accruals	51.45	55.99	58.88
Commercial Borrowing	120.04	130.63	137.40
Total	**200.88**	**220.00**	**220.00**

4.304 As per MYT Regulations, 2011;

5.11 The WACC for each year of the Control Period shall be computed at the start of the Control Period in the following manner:

Where,

$$WACC = \left[\frac{D/E}{1+D/E}\right] * r_d + \left[\frac{1}{1+D/E}\right] * r_e$$

……………..

*r_d is the Cost of Debt and shall be determined at the beginning of the Control Period after considering Licensee's proposals, present cost of debt already contracted by the Licensee, credit rating, **benchmarking** and other relevant factors (risk free returns, risk premium, prime lending rate etc.);…."*

4.305 The Commission has analysed the submissions made by all the Discoms on new loans taken by them during FY 2011-12 and has compared the average interest rates applicable for FY 2011-12 across all Discoms, in order to benchmark the same. The Commission observed that the interest rate (average) applicable to TPDDL for funding of capex and working capital requirement (as per submission vide letter dated June 13, 2012) is the lowest and hence has been considered for approving the interest liabilities on the normative loans approved for the Control Period for all Discoms.

4.306 The details of new loans approved by the Commission for the FY 2011-12 are mentioned below.

Table 142: Approved New Loan Details for Second Control Period

Year	Type	Loan Details		
		Amount	Interest Rate	Repayment Details
FY 2012-13	Capex*	120.04	11.21%	Repayment in 10 yrs (equal annual
	WC#	11.99	11.62%	Rolling Basis
FY 2013-14	Capex*	130.63	11.21%	Repayment in 10 yrs (equal annual
	WC#	41.87	11.62%	Rolling Basis
FY 2014-15	Capex*	137.40	11.21%	Repayment in 10 yrs (equal annual
	WC#	42.34	11.62%	Rolling Basis

** Capital Expenditure # Working Capital*

4.307 For determining the closing values of equity and free reserves the Commission has considered the closing value for FY 2011-12 approved in the Order dated August 26, 2011 and approved addition in free reserves as mentioned in Table 141. The summary of addition in equity and free reserves approved by the Commission for the Control Period is given below.

Table 143: Approved addition in Equity and Free Reserves (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Equity			
Opening	368.00	368.00	368.00
Addition	0.00	0.00	0.00
Closing	368.00	368.00	368.00
Free Reserves			
Opening	507.58	579.35	640.32

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Addition	51.45	55.99	58.88
Closing	579.35	640.32	700.72
Total	**947.35**	**1008.32**	**1068.72**

4.308 Debt approved by the Commission for funding of capital expenditure is shown below:

Table 144: Approved Debt (Rs. Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Capex Loan			
Opening	1754.27	1874.31	2004.94
Addition	120.04	130.63	137.40
Closing	1874.31	2004.94	2142.34
Working Capital Loan			
Opening	354.23	366.22	408.09
Addition	11.99	41.87	42.34
Repayment	0.00	0.00	0.00
Closing	366.22	408.09	450.43

Determination of WACC and RoCE

Petitioner's Submission

4.309 The Petitioner has determined the weighted average cost of capital (WACC) for FY 2012-13 to FY 2014-15 considering the proposed debt-equity ratio, cost of equity at 16% and weighted average cost of debt. The weighted average cost of debt has been calculated by dividing total interest cost by average debt for the period FY 2012-13 to FY 2014-15.

4.310 The Petitioner has calculated the return on capital employed considering the Regulated Rate Base (RRB) and the WACC for FY 2012-13 to FY 2014-15. The summary of the RoCE calculations, submitted by the Petitioner is provided in the table below.

Table 145: Proposed RoCE for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Closing RRB for the year	2724.47	2940.42	3195.05
Gross Interest	200.14	223.98	242.70
Average Debt	1700.01	1806.65	1944.79
Op. Bal of Debt	1665.15	1734.88	1878.41
Cl. Balance of Debt	1734.88	1878.41	2011.17
Rd – Percentage of Cost of Debt	11.77%	12.40%	12.48%
Average Equity	1011.21	1110.50	1229.21
Re- Percentage of Return on Equity	16.00%	16.00%	16.00%
WACC	13.35%	13.77%	13.84%
RoCE	**363.70**	**404.87**	**442.28**

Commission's Analysis

4.311 For determining the WACC, the Commission has followed the methodology specified in MYT Regulations, 2011. Debt to equity ratio has been considered on the average values of debt and equity (including free reserves) approved by the Commission for funding of the asset capitalised. The cost of equity has been considered at 16% and the cost of debt has been determined by dividing total interest cost (on approved loans) by average debt approved for the respective years of the Control Period, FY 2012-13 to FY 2014-15.

4.312 Based on the RRB approved and the WACC calculated using the above methodology the Commission approves the RoCE for the Control Period given in table below.

Table 146: Approved RoCE for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
RRBi	2417.96	2508.71	2605.18
Equity (Average)	911.46	977.83	1038.52
Debt (Average)	2174.51	2326.78	2502.90
Rate of Return on Equity	16.00%	16.00%	16.00%
Rate of Return on Debt	9.97%	10.12%	10.25%
WACC	11.75%	11.86%	11.94%
RoCE	**284.14**	**297.56**	**310.93**

Allocation into Wheeling and Retail Supply

4.313 The Commission has allocated the RoCE approved above into Wheeling and Retail Supply considering the following:

(a) RRB allocated to the respective business

(b) Debt and Equity in the proportion of allocation of total GFA into Wheeling and Retail supply for each year

4.314 The summary of RoCE approved for Wheeling and Retail supply business is given below.

Table 147: Allocation of RoCE for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
RoCE – Wheeling	204.32	211.98	219.79
RoCE – Retail Supply	79.82	85.58	91.14

Truing up of RoCE for the Control Period

4.315 Since all elements of RoCE are subjected to True-Up, the Commission would also True-Up the RoCE for each year of the Control Period, FY 2012-13 to FY 2014-15 approved above at the end of the respective years of the Control Period.

Capitalisation of Expenses & Interest Charges

Petitioner's Submission

4.316 The capitalisation of interest and other expenses as submitted by the Petitioner is given in the table below.

Table 148: Proposed Capitalization of Interest and Other Expenses (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Interest & Finance Charges Capitalised	6.79	7.76	7.08
Employee Expenses	39.03	47.98	59.06
A&G Expenses	0.00	0.00	0.00
Total	**45.82**	**55.73**	**66.14**

Commission's Analysis

4.317 TPDDL had appealed against the MYT Order of the Commission in Hon'ble ATE on interest capitalisation by the Commission for FY 2007-08 to FY 2010-11 of the earlier Control Period (FY 2007-08 to FY 2011-12).

4.318 In its written submission to the Hon'ble ATE, the Commission submitted that

For the MYT Period DERC is following the principle of Return on Capital Employed in which it allows Return on Equity and Interest on Loan under RoCE only for the assets capitalized. Any interest cost incurred before capitalization is considered as IDC (Interest During Construction) and would be included in Asset base only after capitalization. DERC would correct this error based on this principle in the True up Order.

4.319 The Commission had accordingly rectified this in the Order dated August 26, 2011. The Commission has, therefore, not approved any capitalization of interests for the current Control Period (FY 2012-13 to FY 2014-15).

4.320 For capitalizing the employee for the Control Period, the Commission has considered that 10% of the Employee expense will be capitalised during each year of the Control Period, as was proposed by the Petitioner in the MYT Petition for each year of the Second Control period (FY 2012-13 to FY 2014-15) , as shown in the table below.

Table 149: Approved Expense Capitalization for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Interest & Finance Charges Capitalised	00.00	00.00	00.00
Employee Expenses Capitalised	28.01	30.26	32.70
A&G Expenses Capitalised	00.00	00.00	00.00
Total Capitalisation	**28.01**	**30.26**	**32.70**

Allocation into Wheeling and Retail Supply

4.321 The Commission has allocated expense capitalization into Wheeling and Retail Supply business in the same proportion as the allocation of approved employee expenses into Wheeling and Retail Supply, as shown below:

Table 150 Allocation of Approved Expense Capitalization (Rs. Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Expenses Capitalised – Wheeling	19.31	20.86	22.54
Expenses Capitalised – Retail Supply	**8.70**	**9.40**	**10.16**

Tax Expenses

Petitioner's Submission

4.322 The Petitioner has submitted the details about taxes on income tax for FY 2012-13 to FY 2014-15, subject to true-up, as shown in the table below:

Table 151: Proposed Tax Expenses for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Average Equity	1011.21	1110.50	1229.21
RoE @16%	161.79	177.68	196.67
Gross up of Tax(Tax rate @ 20%)	202.24	222.10	245.84
Tax	**40.45**	**44.42**	**49.17**

Commission's Analysis

4.323 As per MYT Regulations 2011,

".5.32 Tax on income, if any, liable to be paid on the Licensed business of the Distributio Licensee shall be limited to tax on return on the equity component of capital employed. Any additional tax other than this shall not be a pass through, and it shall be payable by the Distribution Licensee itself.

5.33 The actual assessment of income tax should take into account benefits of tax holiday, and the credit for carry forward losses applicable as per the provisions of the Income Tax Act 1961 shall be passed on to the consumers.."

4.324 The Commission has approved the Income Tax liability for FY 2012-13 to FY 2014-15 as shown in the table below:

Table 152 Approved Tax Expenses for FY 2012-13 to FY 2014-15

	Particulars	FY 2012-13	FY 2013-14	FY 2014-15
A	RB (Average)	2417.96	2508.71	2605.18
B	Equity	911.46	977.83	1038.52
C	Debt	2174.51	2326.78	2502.90
D=B/(B+C)	*% Equity*	*30%*	*30%*	*29%*
E=D*A	Equity considered for Income tax	714.16	742.32	763.97
F	*Rate of Return*	*16%*	*16%*	*16%*
G=F*E	Return on Equity	114.27	118.77	122.23
H	*MAT rate*	*20.01%*	*20.01%*	*20.01%*
I=H*G	**Income Tax**	**22.86**	**23.77**	**24.46**

4.325 The Commission would, however, True-Up the tax expenses based on the actual tax liability (limiting it to income tax paid only on return to equity) at the end of each year of the Control Period, as per the MYT Regulations, 2011:

4.326 Further, the Commission has allocated the tax expenses into Wheeling and Retail Supply in the ratio of RoCE approved for Wheeling Business to that approved for Retail Supply Business for the respective years of the Control Period.

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Income Tax – Wheeling Business	16.44	16.93	17.29
Income Tax – Retail Supply	**6.42**	**6.84**	**7.17**

Non Tariff Income

Petitioner's Submission

4.327 The Petitioner has submitted Non Tariff Income (NTI) for FY 2012-13 to FY 2014-15 as shown in the table below.

4.328 The Petitioner has not submitted any allocation of NTI into Wheeling and Retail Supply Business.

Table 153: Proposed Non-Tariff Income for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Non Tariff Income	69.17	76.94	82.64

Commission's Analysis

4.329 The Commission has approved the NTI for FY 2012-13 to FY 2014-15 at the same level as approved for FY 2010-11 in Chapter 3 of this Order net of rebate earned by the Petitioner for early payment of power purchase bills during FY 2010-11 (as per the audited accounts), as shown in the table below.

Table 154: Approved Non-Tariff Income for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2010-11	FY 2012-13	FY 2013-14	FY 2014-15
Total NTI approved for FY 2010-11	97.73			
Total Rebate earned on early payment of power purchase bills (as per audited accounts of FY 2010-11)	23.45			
Non Tariff Income	**74.28**	**74.28**	**74.28**	**74.28**

Allocation into Wheeling and Retail Supply

4.330 The Commission has allocated the NTI into Wheeling and Retail Supply business in the ratio of 40:60. The summary of the same is provided in the table below:

Table 155: Approved Allocation of NTI for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
NTI – Wheeling	29.71	29.71	29.71
NTI – Retail Supply	44.57	44.57	44.57

Truing up of NTI for the Control Period

4.331 The Commission shall True-Up the NTI based on the actual values while truing up for each year of the Control Period as per MYT Regulations, 2011.

Other Miscellaneous Expenses/New Initiatives

Petitioner's Submission

4.332 The Petitioner has also proposed Rs 8.00 Cr for each year of the MYT Control Period, FY 2012-13 to FY 2014-15 as additional expense on account of expenditure incurred on some new initiatives, as shown in the table below:

(a) Consumer Awareness / Education: TPDDL has requested the Commission to allow Rs 2 Cr for for creating general awareness on electricity usage and its rules & regulations, educating people at large about their rights & duties.

(b) Energy conservation and Demand side management: TPDDL has requested the Commission to allow Rs 3 Cr towards energy conservation and demand side management measures.

(c) Additional budget for training: The Petitioner has requested the Commission to allow additional Rs 3 Cr towards training expenses.

Table 156 Expenses proposed under new initiatives for FY 2012-13 to FY 2014-15 (Rs. Cr)

Particular	FY 2012-13	FY 2013-14	FY 2014-15
Consumer awareness	2.00	2.00	2.00
Energy Conservation/DSM	3.00	3.00	3.00
Training	3.00	3.00	3.00
Total	**8.00**	**8.00**	**8.00**

Commission's Analysis

4.333 The Commission has analysed the break-up of the expenses submitted by the Petitioner in detail and observed that training expenses form part of the base expenses considered by the Commission for the purposes of projections of A&G expenses for the Control Period. Similarly, the consumer awareness/education expenses have been included under the head of 'advertisements and publicity' which also form part of the base A&G expenses. This was also confirmed by the Petitioner. As regards the DSM expenses, the Commission has directed the Petitioner to submit the schemes for approval of the Commission which shall be considered as a part of Capex schemes.

Aggregate Revenue Requirement

Petitioner's Submission

4.334 The table given below provides a summary of the Aggregate Revenue Requirement (ARR) as proposed by the Petitioner for the Control Period. The Petitioner, in the MYT Petition has not submitted the ARR for Wheeling and Retail Supply business.

Table 157: Proposed ARR for FY 2012-13 to FY 2014-15 (Rs Cr)

Expenditure	FY 2012-13	FY 2013-14	FY 2014-15
Cost of power purchase, including T&D losses	3587.63	4193.98	4691.79
Inter-State Transmission charges	259.70	297.15	305.74
Intra-state Transmission charges	201.42	211.49	222.06
SLDC fees and charges	3.92	4.49	4.62
O&M Expenses	548.03	662.23	803.81
Depreciation including AAD	211.09	227.22	258.82
New Initiative	8.00	8.00	8.00
Return on Capital Employed	363.70	404.87	442.28
Income Tax	40.45	44.42	49.17
Less			
Other Income (Including income from wheeling charges)	69.17	76.94	82.64
Annual Revenue Requirement	**5154.76**	**5976.91**	**6703.65**

Commission's Analysis

4.335 The table given below provides a summary of the Aggregate Revenue Requirement as approved by the Commission for FY 2012-13 to FY 2014-15. Detailed analysis of each expense head has already been provided in the above sections.

Table 158: Approved ARR for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Cost of Power Purchase	3170.35	3605.02	3986.40
Inter-State Transmission charges	169.13	177.58	186.46
Intra-state Transmission charges	192.48	162.92	187.21
SLDC fees and charges	0.46	0.49	0.51
O&M Expenses (Net of expenses capitalized)	390.34	413.51	438.79
Depreciation	126.71	133.62	141.01
New Initiative	0.00	0.00	0.00
Return on Capital Employed	284.14	297.56	310.93
Income Tax	22.86	23.77	24.46
Less			
Non Tariff Income	74.28	74.28	74.28
Annual Revenue Requirement	**4282.20**	**4740.20**	**5201.49**

4.336 Based on the allocation of different expenses as already discussed above the approved ARR for Wheeling and Retail Supply business is given below.

Table 159: Approved ARR for Wheeling Business for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Operation & Maintenance Costs	241.34	254.41	270.10
Depreciation	97.22	102.41	107.96
Return on Capital Employed	204.32	211.98	219.79
Income Tax Provision	16.44	16.93	17.29
Less:			
Non Tariff Income	29.71	29.71	29.71
Aggregate Revenue Requirement	**529.61**	**556.01**	**585.43**

Table 160: Approved ARR for Retail Supply Business for FY 2012-13 to FY 2014-15 (Rs Cr)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15
Cost of Power Purchase	3170.35	3605.02	3986.40
Inter-State Transmission charges	169.13	177.58	186.46
Intra-state Transmission charges	192.48	162.92	187.21
SLDC fees and charges	0.46	0.49	0.51
Operation & Maintenance Costs	149.00	159.11	168.69
Depreciation	29.50	31.22	33.05
Return on Capital Employed	79.82	85.58	91.14
Income Tax Provision	6.42	6.84	7.17
Less:			
Non Tariff Income	44.57	44.57	44.57
Annual Revenue Requirement	**3752.59**	**4184.19**	**4616.06**

A5: TARIFF DESIGN

Components of Tariff Design

5.1 The Commission has considered the following components for tariff designing of the Distribution Licensees.

(a) Consolidated Sector Revenue Gap/(Surplus)

(b) Cost of service

(c) Cross-subsidization in tariff structure

Consolidated Revenue (Gap)/ Surplus for the Sector

Revenue (Gap)/ Surplus till FY 2010-11

5.2 The Commission has approved the revenue (gap)/surplus for the Petitioner for the past period, FY 2007-08 to FY 2010-11 (as discussed in details in Chapter A3 of this Order) as summarised in the table below:

Table 161: Revenue (Gap)/ Surplus of TPDDL for till FY 2010-11 (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening level of Gap	(156.34)	(365.84)	(351.10)	(1102.56)
Contingency Reserve Adjusted towards Meeting Revenue Gap				45.51
Revenue (Gap)/Surplus approved in the True-up Order for FY 2007-08	(183.79)			
Revenue Requirement for the year		2295.14	3259.42	3679.09
Revenue at existing tariffs		2344.58	2567.42	2802.60
Surplus/ (Gap) for the year		49.44	(692.00)	(876.49)
Additional Surplus/ (Gap) for the year on account of Hon'ble ATE Orders	(2.87)			
Closing level of (Gap)/Surplus	(343.00)	(316.40)	(1043.10)	(1933.54)
Carrying Cost for the year @	9.15%	10.17%	8.53%	8.87%
Carrying Cost	(22.84)	(34.69)	(59.46)	(132.63)
Closing Balance of Net (Gap)/ Surplus	**(365.84)**	**(351.10)**	**(1102.56)**	**(2066.17)**

5.3 The summary of revenue (gap)/ surplus approved for BRPL and BYPL till FY 2010-11 is shown below:

Table 162: Revenue (Gap)/ Surplus of BRPL till FY 2010-11 (Rs. Cr)

Particulars	FY 2010-11
Opening level of Gap	(1679.57)
Contingency Reserve Adjusted towards Meeting Revenue Gap	28.91
Revenue (Gap)/Surplus approved in the True-up Order for FY 2007-08	

Particulars	FY 2010-11
Revenue Requirement for the year	5,235.64
Revenue at existing tariffs	3,929.66
Surplus/ (Gap) for the year	(1305.98)
Closing level of (Gap)/Surplus	(2956.64)
Carrying Cost for the year @	11.66%
Carrying Cost	(268.61)
Closing Balance of Net (Gap)/ Surplus	**(3225.29)**

Table 163: Net Revenue (Gap)/ Surplus of BYPL till FY 2010-11 (Rs. Cr)

Particulars	FY 2010-11
Opening level of Gap as approved in Tariff Order dated August 26, 2011	(506.65)
Contingency Reserve Adjusted towards Meeting Revenue Gap	7.43
Revenue (Gap)/Surplus approved in the True-up Order for FY 2007-08	
Revenue Requirement for the year	3,076.12
Revenue at existing tariffs	2,064.73
Surplus/ (Gap) for the year	(1011.39)
Closing level of (Gap)/Surplus	(1510.61)
Carrying Cost for the year @	11.64%
Carrying Cost	(116.97)
Closing Balance of Net (Gap)/ Surplus	**(1627.58)**

Table 164: Revenue (Gap)/ Surplus for all DISCOMs at the end of FY 2010-11 (Rs. Cr)

Particulars	Up to FY 2010-11
BRPL	(3225.29)
BYPL	(1627.58)
TPDDL	(2066.17)
Total	**(6919.00)**

5.4 It can be seen from the above that the accumulated Revenue Gap till FY 2010-11 for all the DISCOMs are Rs 6919.00 Cr.

Revenue (Gap)/ Surplus for FY 2012-13 at Existing Tariffs

5.5 The Summary of net revenue (gap)/ surplus approved for TPDDL at existing tariffs for the current year, FY 2012-13 is shown below:

Table 165: Revenue (Gap)/ Surplus of TPDDL at Existing Tariffs for FY 2012-13 (Rs. Cr)

Particulars	FY 2012-13
Revenue Requirement for the year	4282.20
Revenue at existing tariffs	3986.08
Surplus/ (Gap) for the year	**(296.12)**

5.6 The Summary of net revenue (gap)/ surplus for BRPL and BYPL at existing tariffs for the current year, FY 2012-13 is shown below:

Table 166: Revenue (Gap)/ Surplus of BRPL at Existing Tariffs for FY 2012-13 (Rs. Cr)

Particulars	FY 2012-13
Revenue Requirement for the year	5813.98
Revenue at existing tariffs	5230.94
Surplus/ (Gap) for the year	**(583.03)**

Table 167: Revenue (Gap)/ Surplus of BYPL at Existing Tariffs for FY 2012-13 (Rs. Cr)

Particulars	FY 2012-13
Revenue Requirement for the year	3387.99
Revenue at existing tariffs	2864.81
Surplus/ (Gap) for the year	**(523.17)**

Table 168: Revenue (Gap)/ Surplus for all DISCOMs for FY 2012-13 (Rs. Cr)

Particulars	FY 2012-13
BRPL	(583.03)
BYPL	(523.17)
TPDDL	(296.12)
Total	**(1402.32)**

Treatment of Revenue (Gap)/Surplus

Petitioner's Submission

5.7 The Petitioner has proposed aggregate revenue requirement (ARR) of Rs 5154.76 Cr for FY 2012-13 (without past revenue gaps and carrying cost) against a projected revenue collection of Rs 4372.86 Cr at existing tariff. Thus, the revenue deficit at existing tariff proposed by the Petitioner for FY 2012-13 is Rs 781.90 Cr.

5.8 The Petitioner has requested the Commission for a suitable tariff hike in order to recover the entire current year revenue gap.

Commission's Analysis

5.9 The revenue deficit for FY 2012-13 of the three DISCOMs is Rs 1402.32 Cr. While, the accumulated revenue deficit till FY 2010-11 (along with carrying cost) is Rs 6919.00 Cr. Keeping in view the significant deficit with all three DISCOMs and in an attempt to make tariffs cost reflective, the Commission has decided to revise the tariff for all consumer categories in order to enable the DISCOMs to at least recover the approved revenue requirement for FY 2012-13.

5.10 For meeting carrying cost of the revenue gap till FY 2010-11 and liquidation of revenue gap, the Commission has decided to introduce a surcharge of 8% over the revised tariff.

Revenue (Gap)/Surplus at Approved Tariffs

5.11 The summary of revenue billed at existing tariffs for TPDDL for FY 2012-13 is shown below:

Table 169: Revenue at existing tariffs (Rs. Cr)

Summary of Revenue	Fixed Charge	Energy Charge	Total Revenue Billed
Domestic	57.72	1250.52	1308.24
Non-Domestic	106.53	859.65	966.18
Industrial	91.91	1239.18	1331.09
Public Lighting	0.00	57.88	57.88
Irrigation & Agriculture	0.39	3.22	3.61
Railway Traction	4.43	34.68	39.12
DMRC	4.89	73.55	78.44
Others (DIAL, DJB, Temporary, Misuse, Enforcement etc.)	11.42	210.13	221.55
Total	277.29	3728.82	4006.11
Total Revenue Collected @ 99.50% Collection Efficiency			**3986.08**

5.12 Taking the collection efficiency at 99.50% as approved for FY 2012-13, the revenue realized in FY 2012-13 projected by the Commission at existing tariff is Rs 3986.08 Cr.

5.13 After revision of the tariff, the summary of revenue at the tariff approved now is shown below:

Table 170: Revenue at revised tariffs (Rs. Cr)

Summary of Revenue	Fixed Charge	Energy Charge	Total Revenue Billed
Domestic	72.00	1526.89	1598.89
Non-Domestic	124.95	986.03	1110.98
Industrial	107.56	1427.32	1534.87
Public Lighting	0.00	70.95	70.95
Irrigation & Agriculture	0.49	4.46	4.95
Railway Traction	4.43	42.15	46.58
DMRC	5.81	92.24	98.05
Others	9.99	221.99	231.98
Total	325.22	4372.03	4697.25
Total Revenue Collected @ 99.50% Collection Efficiency			**4673.77**

5.14 Taking the collection efficiency at 99.50% as approved for each year of the MYT Control Period, the revenue realized in FY 2012-13 projected by the Commission is Rs 4673.77 Cr.

5.15 After revision of the tariff, the net revenue (gap)/ surplus for TPDDL along with adjustment at approved tariffs is shown below:

Table 171: Net Revenue (Gap)/ Surplus of TPDDL at Revised Tariffs for FY 2012-13(Rs. Cr)

Particulars	FY 2012-13
Revenue Requirement for the year	4282.20
Revenue available at revised tariffs	4673.77
(Gap)/ Surplus for the year	**391.57**

5.16 The Commission observes that the revenue gap for the Petitioner till FY 2010-11 is Rs 2064.68 Cr, while revenue gap for FY 2012-13 at existing tariff is Rs 296.12 Cr. The tariff increase approved by the Commission in this Order will enable the Petitioner to generate additional revenue of Rs 687.69 Cr in the remaining period of the year, leaving revenue surplus for FY 2012-13 on standalone basis at Rs 391.57 Cr. The surcharge by the Commission in this Order will enable the Petitioner to generate additional revenue of Rs 284.38 Cr in the remaining period of the year.

Cost of Service Model

5.17 While determining the revenue requirement, various sectors of services, viz. generation, transmission and the distribution cost contributes to the total cost of service. The relative burden of constituent consumer categories is assessed and on the basis of the cost imposed on the system, it is decided as to how much share is due to which category of consumers. Although, it shall be equitable to have the embedded cost in designing the tariff for different consumer categories, it calls for a detailed database of allocated costs. Such allocations in the determination of embedded cost are done on the basis of following factors:

(a) Voltage of supply;

(b) Power factor;

(c) Load factor;

(d) Time of use of electricity;

(e) Quantity of electricity consumed,

(f) AT&C Loss etc.

5.18 As the detailed information regarding all the above factors except AT&C loss is not available, it would be difficult to assess the cost of service with reference to all the above factors except AT&C loss.

5.19 The Commission has carried out a study for calculating the voltage wise cost of supply (CoS) for all the three DISCOMs for FY 2012-13 to FY 2014-15. The approach adopted by the Commission for determining the CoS for different voltage levels has been described in the following paragraphs.

5.20 The approved ARR of the Wheeling and Retail Supply business is allocated to different voltage levels and the same has been considered along with the energy sales to the respective voltage level to arrive at the Paisa per unit Wheeling charge and Retail Supply Charge for that voltage level (detailed methodology discussed ahead).

Allocation of Wheeling ARR

5.21 The Commission has considered the gross energy sales (MU) approved for DISCOM for the year and has allocated the same to different voltage levels in the proportion of energy sales (MU) to these voltages to total sales in that year as submitted by the respective DISCOM. Both BRPL and BYPL has submitted that there is no energy sales above 66 kV level in their distribution area and therefore, no energy sales has been considered above 66 kV level while computing the CoS. TPDDL has shown 73.31% of the sales to DMRC as sales above 66 kV and same has been considered by the Commission

Table 172: Approved Energy Sales (MU)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL
Sales above 66 kV level	0.00	0.00	139.29	0.00	0.00	146.62	0.00	0.00	161.28
Sales at 33/66 kV level	304.77	150.00	118.57	354.77	180.00	125.64	364.77	200.00	135.68
Sales at 11 kV level	1449.88	477.30	867.86	1555.32	518.07	928.36	1670.60	562.76	993.56
Sales at LT level	7867.79	4616.84	6143.17	8521.60	4985.44	6660.60	9241.41	5387.65	7227.17
Total	**9622.43**	**5244.14**	**7268.89**	**10431.69**	**5683.51**	**7861.22**	**11276.78**	**6150.41**	**8517.70**

5.22 The Commission has, thereafter, grossed up the energy sales (MU) at the specific voltage level with the respective distribution losses (%) at that level to arrive at the Energy Input (MU) for that level. Since the accurate baseline data for the voltage wise distribution losses is not available, the Commission has considered the estimates of the same after considering the submissions made by the DISCOMs, and approved distribution losses. The summary of the voltage wise distribution losses considered by the Commission is as follows.

Table 173: Distribution Loss (%)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL
Loss above 66 kV level	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Loss at 33/66 kV level	1.41%	0.92%	1.25%	1.39%	0.90%	1.25%	1.37%	0.90%	1.25%
Loss at 11 kV level	2.40%	1.97%	3.96%	2.35%	2.00%	3.96%	2.30%	2.00%	3.96%
Loss at LT level	15.93%	18.07%	15.17%	14.98%	16.84%	14.55%	13.98%	15.57%	14.01%

5.23 The Commission would like to re-iterate that the voltage wise distribution losses considered above are estimates and may not reflect the actual picture. The

Commission, in this regard directs all the three DISCOMs (BRPL, BYPL and TPDDL) to immediately carry out energy audit of the sales at HT level (33 kV and 11kV) so that the actual data of distribution losses at different voltage levels could be used to calculate the cost of supply in the next Tariff Order. The summary of Energy Input (MU) for the respective voltage levels are shown below:

Table 174: Approved Energy Input (MU)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL
Input for 66 kV level	0.00	0.00	139.29	0.00	0.00	146.62	0.00	0.00	161.28
Input for 33/66 kV level	309.13	151.39	120.07	359.77	181.63	127.23	369.84	201.82	137.40
Input for 11 kV level	1485.53	486.89	903.64	1592.75	528.65	966.64	1709.93	574.25	1034.53
Input for LT level	9359.03	5634.77	7242.05	10023.40	5994.84	7794.66	10743.54	6381.44	8404.47
Total	**11153.68**	**6273.05**	**8265.76**	**11975.92**	**6705.12**	**8888.54**	**12823.30**	**7157.50**	**9576.39**

5.24 Next, the Commission has allocated the approved GFA of the DISCOMs to different voltage levels. For this, the Commission had directed the DISCOMs to submit their estimates of allocation of GFA to different voltage levels. TPDDL vide letter no dated May 8, 2012 has submitted the estimates as per their cost records. BRPL and BYPL have submitted the allocation of GFA to different voltage level in their petition only.

5.25 Based on the voltage wise assets allocation submitted by DISCOMs, the Commission has allocated the Wheeling ARR to the assets at respective voltage levels, which is summarised below:

Table 175: Wheeling Cost allocation asset wise (Rs Cr)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL
Asset at 66 kV level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asset at 33/66 kV level	4.78	14.69	122.49	5.15	17.35	130.02	5.74	18.29	138.21
Asset at 11 kV level	107.05	58.06	277.94	115.96	65.83	292.87	129.65	69.79	309.35
Asset at LT level	587.16	385.78	129.18	636.14	431.53	133.12	711.15	457.72	137.87
Total	**698.99**	**458.53**	**529.61**	**757.25**	**514.70**	**556.01**	**846.53**	**545.80**	**585.43**

5.26 The Wheeling cost apportioned above to a particular assets category is thereby reallocated to different voltage levels in proportion of their contribution to the energy input at that level as shown below:

Table 176: Wheeling Cost allocated to different voltages (Rs Cr)

Particulars	FY 2012-13			FY 2013-14			FY2014-15		
	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL
Above 66 kV level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
At 33/66 kV level	0.13	0.35	1.78	0.15	0.47	1.86	0.17	0.52	1.98
At 11 kV level	15.30	5.76	44.22	16.58	6.70	46.45	18.57	7.23	48.84
At LT level	683.56	452.42	483.61	740.51	507.53	507.70	827.80	538.06	534.61
Total	**698.99**	**458.53**	**529.61**	**757.25**	**514.70**	**556.01**	**846.53**	**545.80**	**585.43**

5.27 Based on the energy sales at the respective voltage level the Commission has determined Wheeling Charge per unit for different voltages for FY 2012-13, FY 2013-14 and FY 2014-15.

Table 177: Wheeling Charge (Paisa per unit)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL
Above 66 kV level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
At 33/66 kV level	0.43	2.36	15.01	0.44	2.61	14.81	0.45	2.58	14.61
At 11 kV level	10.55	12.06	50.96	10.66	12.94	50.04	11.11	12.85	49.15
At LT level	86.88	97.99	78.72	86.90	101.80	76.22	89.58	99.87	73.97
Total	**72.64**	**87.44**	**72.86**	**72.59**	**90.56**	**70.73**	**75.07**	**88.74**	**68.73**

Allocation of Retail Supply ARR

5.28 The Commission has allocated the Retail Supply ARR in the ratio of energy input determined above for different voltage levels. The Commission has thereafter, determined the Retail Supply charge for a particular voltage level by considering energy sales at that voltage level. The summary of the same is shown below.

Table 178: Retail Supply Charge (Paisa per unit)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL	BRPL	BYPL	TPDDL
Above 66 kV level	0.00	0.00	446.47	0.00	0.00	463.10	0.00	0.00	474.04
At 33/66 kV level	465.15	471.33	452.12	487.61	498.80	468.96	501.61	515.17	480.04
At 11 kV level	469.87	476.38	464.88	492.40	504.40	482.20	506.38	520.95	493.59
At LT level	545.51	569.95	526.33	565.57	594.40	541.95	575.15	604.70	551.26
Total	**531.57**	**558.61**	**516.25**	**552.01**	**583.17**	**532.26**	**562.58**	**594.13**	**541.94**

5.29 The cost of supply determined by the Commission for the different voltage levels is shown below.

Table 179: Cost of Supply for TPDDL (Paisa per Unit)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	Wheeling	RST	Total	Wheeling	RST	Total	Wheeling	RST	Total
Above 66 kV level	0.00	446.47	446.47	0.00	463.10	463.10	0.00	474.04	474.04
At 33/66 kV level	15.01	452.12	467.13	14.81	468.96	483.78	14.61	480.04	494.66
At 11 kV level	50.96	464.88	515.84	50.04	482.20	532.23	49.15	493.59	542.74
At LT level	78.72	526.33	605.05	76.22	541.95	618.17	73.97	551.26	625.23
Average	**72.86**	**516.25**	**589.11**	**70.73**	**532.26**	**602.99**	**68.73**	**541.94**	**610.67**

Table 180: Cost of Supply for BRPL (Paisa per Unit)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	Wheeling	RST	Total	Wheeling	RST	Total	Wheeling	RST	Total
Above 66 kV level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
At 33/66 kV level	0.43	465.15	465.59	0.44	487.61	488.05	0.45	501.61	502.06
At 11 kV level	10.55	469.87	480.42	10.66	492.40	503.07	11.11	506.38	517.49
At LT level	86.88	545.51	632.39	86.90	565.57	652.47	89.58	575.15	664.72
Average	**72.64**	**531.57**	**604.21**	**72.59**	**552.01**	**624.60**	**75.07**	**562.58**	**637.65**

Table 181: Cost of Supply for BYPL (Paisa per Unit)

Particulars	FY 2012-13			FY 2013-14			FY 2014-15		
	Wheeling	RST	Total	Wheeling	RST	Total	Wheeling	RST	Total
Above 66 kV level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
At 33/66 kV level	2.36	471.33	473.69	2.61	498.80	501.41	2.58	515.17	517.75
At 11 kV level	12.06	476.38	488.44	12.94	504.40	517.34	12.85	520.95	533.80
At LT level	97.99	569.95	667.95	101.80	594.40	696.20	99.87	604.70	704.57
Average	**87.44**	**558.61**	**646.05**	**90.56**	**583.17**	**673.73**	**88.74**	**594.13**	**682.87**

Cross-subsidisation in Tariff Structure

5.30 The Electricity Act, 2003 provides for reduction of cross subsidies by moving the category wise tariffs towards cost of supply. The Commission also recognises the need for reduction of cross subsidy. However, it is equally incumbent on the Commission to keep in mind the historical perspective for the need to continue with cross-subsidy for some time.

5.31 Regarding Cross subsidy, clause 8.3 of the National Tariff Policy states,

"....Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross subsidizing the tariff across the board. Subsidies should be targeted effectively and in transparent manner. As a substitute of cross subsidies, the

State Government has the option of raising resources through mechanism of electricity duty and giving that subsidy to only needy consumers. This is a better way of targeting subsidies effectively."

5.32 In line with the above provision of the National Tariff Policy, Clause 9.1 of the MYT Regulations states that any consumer desirous of getting subsidized tariff shall approach the State Government and if the request for subsidy is found justified, the State Government may give subsidy to that class of consumers so that these consumers get electricity at concessional tariff.

5.33 At present, there are a number of consumer classes such as some slabs of domestic consumers, Agriculture & Mushroom Cultivation, Government Schools/Colleges, Hospitals, etc. which are being cross subsidized by other consumers. Several stakeholders have raised serious concern over cross subsidization of some categories and argued that after privatization, electricity distribution is purely commercial operation and there is no justification for making some consumers pays for others. If any class of consumers is to be given concessional tariff on socio-economic ground, the State government shall bear the cost on this count as supporting weaker sections of society is the responsibility of the government.

5.34 The Commission is of the view that in an ideal case electricity tariff for all categories of consumers should be fixed on cost to serve basis. In accordance with the Act and the policies prescribed from time to time, the Commission has made an attempt in this Tariff Order to reduce the prevailing cross-subsidy as detailed in the subsequent sections.

5.35 With the revision in tariff the Commission has made an attempt towards reducing the cross subsidy in the existing tariff structure by approving a higher tariff hike (percentage) for all subsidized categories, than those approved for subsidizing consumer categories, as can be seen from the table below:

Table 182: Ratio of ABR to Average CoS and category-wise tariff hike approved for FY 2012-13

Category	Average Billing Rate at Existing tariff	Average Billing Rate at Revised Tariff		Average Cost of Supply	Ratio of average billing rate at Revised Tariff to Average Cost of supply		% hike in average tariff
		9 month ABR	Full Year ABR		9 month ABR	Full Year ABR	
Domestic	4.10	5.02	5.10	5.89	85%	87%	25%
Non-Domestic Low Tension							
Up to 10 kW	*7.54*	*8.73*	*9.08*	5.89	*148%*	*154%*	*20%*
> 10 kW to 100 kW	*7.30*	*8.40*	*8.72*	5.89	*143%*	*148%*	*20%*
>100 kW	*8.47*	*9.16*	*10.12*	5.89	*155%*	*172%*	*19%*
Non Domestic High Tension	7.45	8.53	8.84	5.89	145%	150%	19%
Small Industrial Power (SIP)							

Category	Average Billing Rate at	Average Billing Rate at Revised Tariff		Average Cost of Supply	Ratio of average billing rate at Revised Tariff to Average Cost of supply		% hike in average
Up to 10kW	*7.12*	8.39	*8.75*	5.89	*142%*	*149%*	*23%*
10-100kW	*6.38*	7.38	*7.69*	5.89	*125%*	*131%*	*21%*
>100 kW	*7.72*	8.40	*9.34*	5.89	*143%*	*159%*	*21%*
Large Industrial Power (LIP)	6.01	6.80	7.05	5.89	115%	120%	17%
Agriculture	2.02	2.76	2.89	5.89	47%	49%	43%
Mushroom Cultivation	3.64	5.25	5.25	5.89	89%	89%	44%
Public Lighting	5.60	6.86	7.25	5.89	116%	123%	29%
Railway Traction (Other than DMRC)	5.76	6.87	7.24	5.89	117%	123%	26%
DMRC	4.13	5.16	5.42	5.89	88%	92%	31%
DJB	7.23	7.78	7.95	5.89	132%	135%	10%

Time of Day (ToD) Tariff

5.36 The Commission believes that Time of Day (ToD) tariff is an important Demand Side management (DSM) measure to give a tariff signal so that peak hour consumption is charged at higher rates which reflect the higher cost of power purchase during peak hours. At the same time, a rebate is being offered on consumption during off-peak hours. This is also meant to incentivise consumers to shift a portion of their loads from peak time to off-peak time, thereby improving the system load factor and even out the load curve. The ToD tariff is aimed at optimizing the cost of power purchase, which constitutes over 80% of the tariff charged from the consumers. It also assumes importance in the context of propagating and implementing DSM and achieving energy efficiency. This is important in Delhi situation as laod varies from 3000 MW to 5000 MW in summer causing problem of surplus during off peak hours.

5.37 Introduction of higher peak hour tariff would initially generate additional revenue which would compensate for the reduction in revenue on account of lower tariff during off-peak hours.

5.38 In the long run, this would provide signals to the consumers to reduce load during peak hours and, where possible, shift this consumption to off-peak hours. Any loss of revenue to the utility on account of shifting of load from peak to off-peak hours in the long run would be compensated by way of reduction of off-peak surplus to the extent of increase in off-peak demand.

5.39 The ToD Tariff would thus have immediate as well as long term benefits for both, consumers as well as the utility and contribute towards controlling the rise in power purchase costs.

5.40 The Commission has decided to introduce TOD Tariff on a pilot basis for large industrial and consumers (300 kW and above). This pilot is targeted to the consumer segment which has capacity to bear a higher burden for peak hour consumption and also at least partly (if not fully) offset the impact of this increase through higher off-peak consumption at lower rates.

5.41 ToD tariff shall be applicable on all consumers (other than domestic) whose sanctioned load/MDI (whichever is higher) is 300 kVA and above as shown below:

Month*	Peak Hour	Surcharge on Energy charges	Off-Peak Hour	Rebate on Energy Charges
April to September	15:00-24:00 Hrs.	10%	24:00-6:00 Hrs.	10%
October to March	17:00-23:00 Hrs.	5%	23:00-6:00 Hrs.	10%

**For other than peak and off-peak hours, normal energy charges will be applicable.*

Tariff Structure

Domestic Tariff

5.42 Domestic tariff is applicable for power consumption of residential consumers, hostels of recognized/aided educational institutions and staircase lighting in residential flats, compound lighting, lifts and water pumps or drinking water supply and fire fighting equipment, etc. in Cooperative Group Housing Societies (CGHS), bonafide domestic use in farm houses, etc.

5.43 All the Cattle/ Dairy Farms and Dhobi Ghat across Delhi with a total consumption of not more than 200 units in a month and connected load of up to 2 kW shall be charged domestic tariff. However, in case the consumption in a month exceeds 200 units, the total consumption including the first 200 units shall be charged non-domestic rates as applicable to the consumers falling under the Non Domestic category.

5.44 The Commission in its Tariff Order dated June 26, 2003 introduced two part tariff for domestic consumers, i.e., fixed charges and energy charges and abolished minimum charges and meter rent. The fixed charge in two-part tariff represents the fixed component of charges, which is independent of consumption level and depends on the fixed cost incurred by the Utility in supplying electricity.

5.45 The Commission has considered the views expressed by the stakeholders and after considering various options, the Commission proposes to continue with the existing methodology of levying fixed charges on slab system, based on the sanctioned load till sanctioned load of 5 kW and for sanctioned load above 5 kW, the fixed charges shall be applicable in Rs/kW terms.

Domestic single delivery point at 11 kV for CGHS

5.46 In respect of tariff for Cooperative Group Housing Societies (CGHS) complexes, the Commission had in tariff schedule of its earlier Orders specified that billing for energy charges would be slab-wise, for the first 44.4% of consumption, next 44.4% of consumption and next 11.2% of consumption as per slabs in the domestic category.

5.47 The Commission, in this tariff Order has revised the slab structure of the domestic consumers. Therefore, the Commission has decided to consider first 60% of the consumption at 0-400 slab and remaining 40% consumption in above 400 slab in this Tariff Order.

Non-Domestic Tariff

5.48 Non-domestic category of consumers comprises two sub-categories, viz., Supply on Low Tension and Supply on High Tension (11 kV and above).

Non-Domestic Low Tension (NDLT)

5.49 This category covers LT non-domestic consumers having contract demand or sanctioned load (whichever is applicable) up to 100kW / 108kVA.

5.50 For the consumers with sanctioned load up to 10 kW in this category, the Commission had specified the kWh based tariff only. The Commission has decided to continue with the existing practice.

5.51 For Non-domestic consumers having contract demand or sanctioned load more than 10 kW (11 kVA) and up to 100 kW (108 kVA), the Commission has specified kVAh based energy charges.

5.52 Non Domestic consumers having contract demand or sanctioned load (whichever is lower) more than 100 kW/108 kVA and up to 200 kW/215 kVA and availing supply on LT will also be charged kVAh tariff which will be higher than tariff for non domestic consumers having contract demand or sanctioned load more than 10 kW and up to 100 kW/(108 kVA). This has been done in view of the fact that the lower the voltage of supply, higher will be the system losses and hence the consumers with connected load more than 100 kW (108 kVA) at LT voltage (400 V) have to be discouraged.

5.53 The Commission believes that with gradual movement towards voltage linked tariff, irrespective of load of the consumer, the tariff for consumption at higher voltages will be lower than that for lower voltages, which will discourage consumers to opt for LT connections particularly for loads higher than 100 kW.

5.54 For existing consumers having sanctioned load/contract demand, whichever is applicable, in kW, the actual power factor of the consumer in the relevant billing cycle shall be considered for converting kW to kVA for computing the fixed charges. For new consumers, the sanctioned load/contract demand shall be in terms of kVA only

Non-Domestic High Tension (NDHT)

5.55 Non-domestic consumers with contract demand or sanctioned load more than 100 kW/ 108 kVA shall avail supply on 11 kV.

5.56 Non domestic consumers availing supply on 33 kV/66 kV or 220 kV will be entitled for rebate of 2.5% and 4% respectively on the applicable energy charges on 11 kV tariff.

5.57 For existing consumers having sanctioned load/contract demand, whichever is applicable, in kW, the actual power factor of the consumer in the relevant billing cycle shall be considered for converting kW to kVA for computing the fixed charges. For new consumers, the sanctioned load/contract demand shall be in terms of kVA only.

Industrial Tariff

5.58 Industrial category of consumers consists of two sub-categories, viz., Small Industrial Power (SIP) and Large Industrial Power (LIP).

Small Industrial Power (SIP)

5.59 This category covers industrial consumers having contract demand or sanctioned load, whichever is applicable, up to 200kW / 215kVA.

5.60 For the consumers with sanctioned load up to 10 kW in this category, the Commission had specified the kWh based tariff only. The Commission has decided to continue with the existing practice.

5.61 For Industrial consumers having contract demand or sanctioned load more than 10 kW/11 kVA and up to 100 kW/108 kVA, the Commission has specified the kVAh based tariff.

5.62 Industrial consumers having contract demand or sanctioned load more than 100 kW/108 kVA and up to 200 kW/215 kVA and availing supply on LT will also be charged kVAh tariff which will be higher than the tariff for Industrial consumers having contract demand or sanctioned load more than 11 kVA and up to 108 kVA. This has been done in view of the fact that lower the voltage of supply, higher the system losses and hence consumers with connected load more than 108 kVA at LT voltage (415 V) have to be discouraged.

5.63 For existing consumers of 10 kW and above having sanctioned load/contract demand, whichever is applicable, in kW, the actual power factor of the consumer in the relevant billing cycle shall be considered for converting kW to kVA for computing the fixed charges. For new consumers, the sanctioned load/contract demand shall be in terms of kVA only.

Large Industrial Power (LIP)

5.64 Industrial consumers with contract demand or sanctioned load more than 108 kVA shall avail supply on 11 kV.

5.65 The Commission believes that with gradual movement towards voltage linked tariff, irrespective of load of the consumer, the tariff for consumption at higher voltages will be lower than that for lower voltages, which will discourage consumers to opt for LT connections particularly for loads higher than 100 kW.

5.66 For supply at 33/66 kV, consumers will get a rebate of 2.5% on the energy charges applicable for supply at 11 kV and a rebate of 4% for supply at 220 kV.

5.67 For existing consumers having sanctioned load/contract demand, whichever is applicable, in kW, the actual power factor of the consumer in the relevant billing cycle shall be considered for converting kW to kVA for computing the fixed charges. For new consumers, the sanctioned load/contract demand shall be in terms of kVA only.

Agriculture

5.68 Agriculture connections are available for tube wells for irrigation, threshers and kutty cutting in conjunction with pumping load for irrigation purpose for loads up to 10 kW and lighting load for bonafide use in 'Kothra'.

Mushroom Cultivation

5.69 This category is applicable to the consumers who are engaged in mushroom cultivation/processing.

Public Lighting

5.70 Tariff for this category is applicable to all street light consumers including MCD, DDA, PWD/CPWD, CGHS, Slums, DSIIDC and certain civilian pockets of MES. The share of MCD, however is dominating as most of the street lights in the city are owned by the MCD.

5.71 As regard to the maintenance charges for street lighting, the Commission would like to clarify that the maintenance charges and other conditions of maintenance of street lights as approved in the Commission's Order dated September 22, 2009 will continue till such time it is amended.

Railway Traction

5.72 This category is applicable to Indian Railways for traction purposes for loads more than 100 kW/108 kVA.

DMRC

5.73 This category is available to Delhi Metro Rail Corporation (DMRC) to run its operations (other than construction projects).The Commission has decided to increase the applicable energy charges for DMRC to meet the cost of supply. The commercial load at DMRC stations shall be metered and billed separately as per the relevant tariff category.

Temporary Supply

5.74 The Commission does not propose any change in the existing tariff methodology for temporary supply as mentioned in the Tariff Schedule.

Delhi Jal Board (DJB)

5.75 In the Tariff Order for FY 2009-10, the Commission had decided to depart from the earlier practice of charging DJB consumption at MLHT tariff by creating a special category for DJB which provides an important public utility service. The special category created is being continued in view of the nature of consumption of DJB.

5.76 In this Tariff Order, the Commission has added DJB supply under LT also in this category.

5.77 For the purpose of conversion of kW to kVA, the actual power factor of the relevant billing cycle shall be considered for the computation of fixed charges.

Delhi International Airport Limited (DIAL)

5.78 The Commission, in the Tariff Order for FY 2009-10, has already created a separate category to cover the consumption for the infrastructure facilities at the airport. However in view of the fact that DIAL is providing services to consumers belonging to higher strata, it will not be fair to give the tariff at par with DJB, which is providing essential services to all consumers including the lowest strata of the society. Accordingly, the Commission has decided to give DIAL, a tariff, which shall be higher than that of DJB but lower than that of Non Domestic HT consumers.

Advertisement and Hoardings

5.79 The Commission, in this Tariff Order has created a separate category to cover the consumption for the advertisements and Hoardings. This category will be applicable for supply of electricity for lighting external advertisements, external hoardings and displays at departments stores, malls, multiplexes, theatres, clubs, hotels, bus shelters, Railway/Metro Stations shall be separately metered and charged at the tariff applicable for 'Advertisements and Hoardings' category, except such displays which are for the purpose of indicating/displaying the name and other details of the shop, commercial premises itself. Such use of electricity shall be covered under the prevailing tariff for such shops or commercial premises.

Tariff Schedule

	Category	Fixed Charges[1]	Energy Charges[2]
1	**Domestic**		
1.1	**Domestic**		
a.	Up to 2 kW connected load		
	0-200 units[3]	40 Rs/month	370 Paisa/kWh
	0-400 units[4]	40 Rs/month	480 Paisa/kWh
	Above 400 units	40 Rs/month	640 Paisa/kWh
b.	Between 2-5 kW connected load		
	0-200 units[3]	100 Rs/month	370 Paisa/kWh
	0-400 units[4]	100 Rs/month	480 Paisa/kWh
	Above 400 units	100 Rs/month	640 Paisa/kWh
c.	Above 5 kW connected load		
	0-200 units[3]	20 Rs /kW/month	370 Paisa/kWh
	0-400 units[4]	20 Rs /kW/month	480 Paisa/kWh
	Above 400 units	20 Rs /kW/month	640 Paisa/kWh
1.2	**Single delivery point on 11 kV for CGHS**		
	First 60%	20 Rs /kW/month	480 Paisa/kWh
	Next 40%	20 Rs /kW/month	640 Paisa/kWh
	In case of cooperative group housing societies having independent connection for common facilities through separate meter, energy charges shall be billed at highest slab tariff for domestic category. Rebate of 10% is admissible on energy charges		
2	**Non-Domestic**		
2.1	**Non- Domestic Low Tension (NDLT)**		
	Up to 10 kW	100 Rs/kW/month	760 Paisa/kWh
	Between 10 kW(11kVA) -100 kW (108 kVA)	115 Rs/kVA/month	725 Paisa/kVAh
	Greater than 100 kW / 108 kVA (400 volts) (No Supply on LT for load > 215 kVA)	150 Rs/kVA/month	850 Paisa/kVAh
2.2	**Non-Domestic High Tension (NDHT)***		
	For supply at 11 KV and above (for load greater than 108 kVA)	125 Rs/kVA/month	715 Paisa/kVAh[5]
	**The Single Point Delivery Supplier shall charge the NDHT tariff to its LT consumers and in addition shall charge an extra 5% of the bill amount at NDHT tariff to cover losses and expenses.*		
3	**Industrial**		
3.1	**Small Industrial Power (SIP) [less than 200 kW/215 kVA]**		
	Up to 10 kW	80 Rs/kW/month	725 Paisa/kWh
	Between 10 kW(11kVA)-100kW (108 kVA)	90 Rs/kVA/month	660 Paisa/kVAh
	Greater than 100 kW/108 kVA (400 volts) (No Supply on LT for load > 215 kVA)	150 Rs/kVA/month	800 Paisa/kVAh

	Category	Fixed Charges[1]	Energy Charges[2]
3.2	**Industrial Power on 11 kV Single Point Delivery for Group of SIP Consumers**	90 Rs/kVA/month	600 Paisa/kVAh[5]
3.3	**Large Industrial Power (LIP) (Supply at 11 kV and above)**	125 Rs/kVA/month	630 Paisa/kVAh[5]
4	**Agriculture**	20 Rs//kW/ month	260 Paisa/kWh
5	**Mushroom Cultivation**	40 Rs /kW/month	520 Paisa/kWh
6	**Public Lighting**		
	Street Lighting[6]		725 Paisa/kWh
	Signals and Blinkers		725 Paisa/kWh
7	**Delhi Jal Board**		
	Supply at LT		
	Up to 10 kW	80 Rs/kW/month	725 Paisa/kWh
	Between 10 kW(11kVA)-100kW (108 kVA)	90 Rs/kVA/month	660 Paisa/kVAh
	Greater than 100 kW/108 kVA (400 volts) (No Supply on LT for load > 215 kVA)	150 Rs/kVA/month	800 Paisa/kVAh
	Supply at 11 kV and above	125 Rs/kVA/month	630 Paisa/kVAh[5]
8	**Delhi International Airport Limited**	150 Rs/kVA/month	675 Paisa/kVAh[5]
9	**Railway Traction[7]**	150 Rs/kVA/month	580 Paisa/kVAh[5]
10	**DMRC (Supply at 220 kV and 66 kV)**	125 Rs/kVA/month	500 Paisa/kVAh
11.	**Advertisements and Hoardings**	500 Rs/month/connection	1000 Paisa/kVAh
12	**Temporary Supply**		
12.1	For a total period of		
A	Less than 16 days	50% of the relevant category	Higher by 30% (temporary surcharge) of the relevant category of tariff
B	More than or equal to 16 days	Same as that of relevant category	Higher by 30% (temporary surcharge) of the relevant category of tariff
12.2	For residential cooperative group housing connections and other domestic connections	Same as that of relevant category	Domestic tariff without any temporary surcharge

	Category	Fixed Charges[1]	Energy Charges[2]
12.3	For religious functions of traditional and established characters and cultural activities	Same as 1.2	Same as 1.2 without temporary surcharge
12.4	For major construction projects	Same as that of relevant category	Same as that of relevant category with temporary surcharge of 30%
12.5	For threshers		
A	During the threshing season for 30 days	Electricity Tax of MCD : Rs 270 per connection	Flat rate of Rs 5,400
B	For extended period		On pro-rata basis for each week or part thereof

Note: The above tariff rates shall be subject to an additional surcharge of 8% on the fixed and energy charges (excluding LPSC, enforcement amount, Arrears, E-tax etc.) towards recovery of past accumulated deficit.

Notes on Superscripts

1 For all categories other than Domestic, Fixed/demand charges are to be levied on sanctioned load or MDI reading, whichever is higher, on per kW/kVA or part thereof, basis. Where the MDI reading exceeds sanctioned load, a surcharge of 30% shall be levied on the fixed charges corresponding to excess load in kW/kVA for such billing cycle only. Wherever, sanctioned load/ contract demand is in kW/HP, the kVA shall be calculated on basis of actual power factor of the consumer, for the relevant billing cycle.

2 Time of Day (TOD) Tariff# -TOD tariff shall be applicable on all consumers (other than domestic) whose sanctioned load/MDI (whichever is higher) is 300 kVA and above as shown below:

Month	Peak hours	Surcharge on Energy Charges	Off-Peak hours	Rebate on Energy Charges
April-September	1500-2400 Hrs	10%	0000-0600 Hrs	10%
October-March	1700-2300 Hrs	5%	2300-0600 Hrs	10%

#For other than peak and off-peak hours normal energy charges will be applicable.

3 Applicable if consumption is up to 200 units per month for the relevant billing cycle.

4 Applicable if consumption is more than 200 units per month for the relevant billing cycle

5 Tariff is for supply at 11 kV. Additional rebate of 2.5% on the energy charges on 11 kV rates for availing supply at 33/66 kV and 4% for supply at 220 kV shall be admissible.

6 Maintenance Charges on street lights would be additional to the specified tariff @ Rs. 84/light point/month and material cost at the rate Rs 19/point/month as per the Commission's Order dated 22 September 2009 till further amended by the Commission. These charges will be payable to the DISCOM only if maintenance services are provided by the DISCOM.

7 Tariffs for Northern Railways Traction are based on the supply being given through a single point delivery and metering point at single voltage. An additional capacity blockage charge is also applicable which is to be calculated as Rs 1260 x (2.97 A +5) where A is contract/maximum demand, whichever is higher, in MVA subject to a minimum of Rs 25000.

Other Terms and Conditions of the Tariff

	Category	Availability	Character of Service
1. Domestic	1.1 Domestic Lighting/Fan and Power (Single Delivery Point and Separate Delivery Points/Meters)	A) Available to following categories of consumers: Residential consumers Hostels of recognized/aided institutions of Municipal Corporation of Delhi or Government of the NCT of Delhi. Staircase lighting in residential flats separately metered. Compound lighting, lifts and water pumps etc., for drinking water supply and fire fighting equipment in residential complexes, if separately metered. In cooperative group housing societies etc. for bonafide use of lighting/fan and power, subject to the provision that the supply is at single delivery point for combined lighting/fan & power. (B)It is available to following consumers. Dispensary/Hospitals/ Public Libraries / School/ College/WorkingWomen's Hostel / Orphanage / Charitable homes run by the Municipal Corporation of Delhi or the Government of the NCT of Delhi. Small Health Centres approved by the Department of Health, Government of NCT of Delhi for providing Charitable Services only. Recognized Centres for welfare of blind, deaf and dumb, spastic children, physically handicapped persons, mentally retarded persons, as approved by the Government of NCT of Delhi. (C) Bed and Breakfast Establishments (Residential Premises) registered u/s 3 of the National Capital Territory of Delhi (Incredible India) Bed and Breakfast Establishments (Registration & Regulations) Act, 2007. (D) Places of worship. (E) Cheshire homes/orphanage. (F) Shelter Homes (including Night Shelters) approved by Delhi Urban Shelter Improvement Board, GoNCTD (G)Electric crematoriums. (H) Professionals i.e. individuals engaged in those	AC 50 Hz, single phase, 230 Volts for load up to 10 kW & AC 50 Hz, three phase, 400 Volts for loads beyond 10 kW AC 50 Hz, 3 phase, 11 kV beyond 100 kW (108 kVA)

	Category	Availability	Character of Service
		activities involving services based on professional skills, viz Doctor, Lawyer, Architect, Chartered Accountant, Company Secretary, Cost & Work Accountant, Engineer, Town Planner, Media Professional and Documentary Film Maker may utilize the domestic connection at their residence for carrying out their professional work in the nature of consultancy without attracting non-domestic tariff for the electricity consumed, provided the area used for professional activity does not exceed the area permitted to be used for such activity in residential area under the Master Plan for Delhi, 2021 (MPD-2021), which as per MPD-2021 is permissible on any one floor only but restricted to less than 50% of the permissible or sanctioned FAR whichever is less on that plot or dwelling unit. (I) Available, for loads up to 21 kW, to farm houses for bonafide domestic self use. (J) The consumers running small commercial establishments from their households in JJ Clusters shall be charged domestic tariff provided that the total consumption of electricity in a month does not exceed 200 units. (K) Cattle / Dairy Farms with a total consumption of not more than 200 units/month and connected load of up to 2kW.	
	1.2 Domestic Connection on 11 kV single delivery point	Same as 1.1(A) and for CGHS flats and loads above 100 kW in case of individual	AC 50 Hz, three phase, 11 kV; on single delivery point

	Category	Availability	Character of Service
2. Non-Domestic	2.1.1 Non-Domestic (Low Tension) – NDLT	Available to all consumers having load (other than the industrial load) up to 100 kW/108 kVA for lighting, fan & heating/cooling power appliances in all non-domestic establishments as defined below: Hostels (other than those recognized/aided institutions of Municipal Corporation of Delhi or Government of the NCT of Delhi) Schools/colleges (Other than those run by Municipal Corporation of Delhi or the Government of NCT of Delhi) Auditoriums Hospitals, nursing homes/diagnostic Centres other than those run by Municipal Corporation of Delhi or the Government of NCT of Delhi. Railways (other than traction) Hotels and restaurants Cinemas Banks Petrol pumps All other establishments, i.e., shops, chemists, tailors, washing, dyeing etc. which do not come under the Factories Act. Cattle farms, fisheries, piggeries, poultry farms, floriculture, horticulture, plant nursery Farm houses being used for commercial activity DMRC for its commercial activities other than traction. Ice-cream parlours and Any other category of commercial consumers not specified/covered in any other category in this Schedule	AC 50 Hz, single phase, 230 Volts up to 10 kW load; AC 50 Hz, 3 phase, 400 Volts for loads above 10 kW and up to 100 kW (108 kVA)
	2.1.2 Non-Domestic High Tension (NDHT) Non-Domestic Power on 11 kV Single Delivery Point NDHT for Commercial Complexes	Available to consumers having load (other than industrial load) above 100 kW/108 kVA Non-Domestic establishments including pumping loads of Delhi Jal Board /DDA/MCD and supply to Delhi Metro Rail Corporation (DMRC) Ltd. for their on going construction projects etc and for commercial purposes other than traction. Available to commercial complexes having load more than 100kW for group of consumers for non-domestic use.	AC 50 Hz, 3 phase, 11 kV
3. Industrial (For consumer having valid MCD Licence	3.1.1 Small Industrial Power (SIP)	Available to Industrial consumers with load up to 100 kW including lighting, heating and cooling load.	AC 50 Hz, single phase, 230 Volts; AC 50 Hz, 3 phase, 400 Volts

	Category	Availability	Character of Service
under Factories Act)	3.1.2 Industrial Power (SIP) on 11 kV Single Delivery Point for Group of SIP Consumers	On single delivery point for group of SIP consumers provided load of any individual consumer does not exceed 100 kW	AC 50 Hz, 3 Phase, 11 kV
	3.2 Large Industrial Power (LIP) a) Supply on 11 kV b) Supply on LT (400 Volts)	Available as primary power to large industrial consumers having load above 100 kW including lighting load. Supply at extra high voltage (33 kV and more) may also be given	AC 50 Hz, 3 phase, 11 kV; AC 50 Hz, 3 Phase, 400 Volts
4. Agriculture		Available for load up to 10 kW for tube wells for irrigation, threshing, and kutti-cuting in conjunction with pumping load for irrigation purposes and lighting load for bonafide use in Kothra.	AC 50 Hz, Single / Three Phase, 230/400 Volts
5. Mushroom cultivation		Available for mushroom growing/cultivation up to 100 kW.	AC 50 Hz, 3 Phase, 400 Volts up to 100 kW
6. Public Lighting	6.1 Street lighting	Available to all street lighting consumers including MCD, DDA, PWD/CPWD, Slums department/DSIIDC/MES/CGHS etc.	AC 50 Hz, Single /three Phase, 230/400 Volts
	6.2 Signals & Blinkers	Available for traffic signals and blinkers of Traffic Police	AC 50 Hz, Single Phase, 230 Volts
7. Railway Traction (other than DMRC)		Available for railway traction for connected load above 100 kW/108 kVA.	AC 50 Hz, Three phase, 220/66/33 kV
8. Delhi Jal Board	DJB- LT	Available to DJB for pumping load & Water Treatment Plants	AC 50 Hz, 3 Phase, 400 Volts up to 100 kW
	DJB-HT	Available to DJB for pumping load & Water Treatment Plants	AC 50 Hz, 3 phase, 11 kV for loads above 100 kW
9. Delhi International Airport Limited		Available to DIAL	AC 50 Hz, 3 phase, 220/66/33 kV
10. Delhi Metro Rail Corporation		Available to Delhi Metro Rail Corporation (DMRC) (not for construction projects)	AC 50 Hz, 3 phase, 220/66/33 kV
11.Temporary Supply	11.1(a) for less than 16 days	Available as temporary connection under the respective category	AC 50 Hz, single phase, 230 Volts; AC 50 Hz, 3 phase, 400 Volts; AC 50 Hz, three phase, 11 kV
	11.1(b) for more than or equal to 16 days		
	11.2 for residential cooperative group housing connections	Same as that of relevant category	
	11.3 for religious functions of traditional and established characters and cultural	Provided for religious functions of traditional and established characters like Ram lila, Dussehra, Janmashtami, Nirankari Sant Smagam, Gurupurb, Durga Puja, Id, Christmas celebrations, Easter, Pageants and cultural activities like NCC camps,	

	Category	Availability	Character of Service
	activities	scouts & guides camps etc. (normally for a period less than 10 days).	
	11.4 for major construction projects	With loads more than 10 kW	
	11.5 for threshers	During the threshing season	
12. Advertisement/ Hoardings		Electricity for lighting external advertisements, external hoardings and displays at departments stores, malls , multiplexes, theatres, clubs, hotels, bus shelters, Railway/Metro Stations shall be separately metered and charged at the tariff applicable for 'Advertisements and Hoardings' category, except such displays which are for the purpose of indicating/displaying the name and other details of the shop, commercial premises itself. Such use of electricity shall be covered under the prevailing tariff for such shops or commercial premises.	AC 50 Hz, single phase, 230 Volts for loads up to 10 kW; AC 50 Hz, 3 phase, 400 Volts for loads more than 10 kW and up to 100 kW (108 kVA)

Electricity taxes and other levies

5.80 The rates stipulated in the Schedule are exclusive of electricity duty and other taxes and charges, as levied from time to time by the Government or any other competent authority, which are payable extra.

Surcharges

5.81 All surcharges shall be levied on the basic tariff applicable to the category of use or category of sanction, whichever has higher tariff.

Payments

5.82 In the event of the electricity bill rendered by the licensee, not being paid in full within the time specified on the bill, a surcharge @ 1.5% on the principal amount of bill which has not been paid shall be levied for each 30 days successive period or part thereof until the payment is made in full without prejudice to the right of the licensee to disconnect the supply after due date in the event of non-payment in accordance with section 56 of Electricity Act, 2003. This will also apply to temporary connections, where payment of final bill amount after adjustment of consumption deposit, is not made by due date.

5.83 The Commission directs the Petitioner, that in case the bill for consumption of electricity is more than Rs. 4,000, payment for the bill shall only be accepted by the Petitioner by means of an Account Payee cheque/DD. However, the Commission has considered that the blind consumers shall be allowed to make payment of electricity bills, for any amount, through cash.

Interpretation/clarification

5.84 In case of doubt or anomaly, if any, in the applicability of tariff or in any other respect, the matter will be referred to the Commission and Commission's decision thereon shall be final and binding.

A6: DIRECTIVES

6.1 Distribution licensee is directed to post the monthly distribution transformer losses and zone/district wise AT&C loss data giving break-up of energy input, energy billed and revenue realization on its website within 3 weeks from the end of the month.

6.2 Distribution licensee is directed to reduce AT&C losses by at least 10% in respect of those zones/districts which are currently having losses in excess of 30% within one year i.e. by August, 2013. These targets shall have to be met by distribution licensee irrespective of the overall AT&C loss achievement targets specified in this Order. Failure to do so will invite penalties.

6.3 All data required for True-up (including kWh & kVAh for the consumers billed on kVAh basis) shall be maintained & shall not be deleted from the data base prior to issuance of Order for True-up for that period by the Commission.

6.4 The Commission directs the distribution licensee to get the Form 2.1(a) audited by the Statutory auditors on a quarterly basis. The auditor certificate in this regard shall be filed in the Commission within 30 days from the end of the quarter.

6.5 The Commission directs the distribution licensee to show power station wise power purchase quantum and cost along with break up under various heads in its audited accounts.

6.6 Distribution licensee shall be responsible for making timely payment of bills/dues to central & state generating stations and transmission utilities. The Commission shall not allow surcharge as a pass through in the ARR, if paid by the distribution licensee, on account of delayed payments.

6.7 The Commission directs the distribution licensee to conduct a safety audit and carry out preventive maintenance as per schedule.

6.8 With respect to AT&C losses, the Commission directs the Petitioner for the following:

(a) Submit Form 2.1(a) on monthly basis along with billing database to the Commission within 3 weeks of the following month.

(b) Submit category wise revenue collection on monthly basis along with the supporting documents within 3 weeks of the following month.

(c) In respect of the directive to include Form 2.1(a) in the quarterly and annual balance sheet, the Commission has decided to accept Auditor’s Certificate in respect of quarterly information. Further, the information may be included as a part of Regulatory accounts annually.

(d) Include the category wise / slab wise consumer details i.e. no of consumer, connected load, sales, power factor, revenue from fixed charges, revenue from demand charges in the quarterly and annual balance sheet.

(e) Include source wise power purchase and sale details i.e. quantum in MU and Rs Cr in the quarterly and annual balance sheet.

(f) Submit monthly report to the Commission giving details of category wise consumer addition and their detail within 3 weeks of the following month.

(g) Submit monthly report to the Commission giving details of no. of connection disconnected / reconnected and their detail within 3 weeks of the following month.

(h) Submit monthly report to the Commission on change of consumer category for consumer within 3 weeks of the following month.

6.9 The Commission directs that whenever journal entries are to be made for bill correction, they shall indicate both the amount reversed as well as the units reversed. The Petitioner shall submit monthly report to the Commission on bill correction / JE entries within 3 weeks of the following month.

6.10 The Commission directs that 100% metering shall be done for street lighting. Energy consumption on account of ballast etc shall be accounted through metered consumption.

6.11 It has been noticed that some of the DISCOMs are showing energy consumption at zero rate in their billing database. The Commission directs that the DISCOMs shall not make any entry related to energy consumption at zero rate.

6.12 The Commission directs DISCOMs to meter self consumption in their own premises. The bills shall be raised at the appropriate tariff for actual consumption recorded based on meter reading every month. The licensee may avail credit at zero tariff to the extent of the normative self consumption approved by the Commission at the end of the financial year.

6.13 All effort shall be made for prudence in short term sale and purchase so as optimize power purchase cost for which detailed directions will be issued by the Commission separately.

6.14 The Commission directs that provisions made on account of power sale and purchase at the end of year i.e. in March shall be adjusted within one month, i.e. in the month of April. Remaining provisions if any shall be considered by the Commission for next year True-up.