



ORDER
on
AGGREGATE REVENUE REQUIREMENT
for
DELHI TRANSCO LIMITED
for
FY 2011-12



DELHI ELECTRICITY REGULATORY COMMISSION
AUGUST, 2011

TABLE OF CONTENTS

LIST OF TABLES.....	3
LIST OF ABBREVIATIONS	5
A1: INTRODUCTION.....	7
DELHI TRANSCO LIMITED.....	7
DELHI ELECTRICITY REGULATORY COMMISSION (DERC)	8
THE COORDINATION FORUM	10
MULTI YEAR TARIFF REGULATIONS AND EXTENSION OF THE CONTROL PERIOD	11
FILING OF PETITION FOR APPROVAL OF ARR FOR FY 2011-12	12
<i>Filing of Petition</i>	12
<i>Acceptance of Petition</i>	12
<i>Interaction with the Petitioner</i>	12
<i>Public Hearing</i>	13
LAYOUT OF THE ORDER.....	15
A2: RESPONSES FROM STAKEHOLDERS	16
INTRODUCTION	16
PAYMENT TO DPCL ON ACCOUNT OF PRIOR PERIOD LIABILITY	16
<i>Stakeholder's Comment</i>	16
<i>Petitioner's Submission</i>	16
<i>Commission's View</i>	17
PAYMENT TO PENSION TRUST	17
<i>Stakeholder's View</i>	17
<i>Petitioner's Submission</i>	17
<i>Commission's View</i>	18
IMPACT OF APPEAL NO 133/2007	18
<i>Stakeholder's Comment</i>	18
<i>Petitioner's Submission</i>	18
<i>Commission's View</i>	18
O&M EXPENSES.....	19
<i>Stakeholder's Comment</i>	19
<i>Petitioner's Submission</i>	19
<i>Commission's View</i>	19
R&M EXPENSES	19
<i>Stakeholder's Comment</i>	19
<i>Petitioner's Submission</i>	19
<i>Commission's View</i>	20
DEPOSIT WORKS.....	20
<i>Stakeholder's Comment</i>	20
<i>Petitioner's Submission</i>	20
<i>Commission's View</i>	20
TRUE UP	21
<i>Stakeholder's Comment</i>	21
<i>Petitioner's Submission</i>	21
<i>Commission's View</i>	21
A3: ANALYSIS OF AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2011-12	22
INTRODUCTION	22
ADDITIONAL POWER PURCHASE LIABILITY AND IMPACT OF ATE ORDERS FOR POLICY DIRECTION PERIOD (FY 2002-03 – FY 2006-07)	23
<i>Additional Power Purchase Liability for Policy Direction Period</i>	23
<i>DVB arrears</i>	28
<i>Metering for NDMC & MES at "Sending end"</i>	29
<i>Interest Expenditure on Short Term Loans</i>	30

True up of Power Purchase Cost for the FY 2005-06 & RLDC/ULDC Charges for the FY 2002-07	31
Surplus Approved for FY 2006-07	32
IMPACT OF ATE ORDERS FOR THE FY 2007-08 TO FY 2010-11	33
Correction of inflation-linked escalation factor for Employee Cost and A&G Expenses	33
Impact of Recommendations of 6 th Pay Commission	37
Additional Repair and Maintenance (R&M) Expenses on account of GIS	41
Additional Administrative and General (A&G) Expenses on account of GIS	43
Efficiency Factor for O&M Expenditure	45
DETERMINATION OF AGGREGATE REVENUE REQUIREMENT FOR FY 2011-12	48
Operation and Maintenance Expenses	48
Escalation Factor for FY 2011-12	48
Employee Expenses	49
Administrative and General Expenses	49
Repairs and Maintenance Expenses	50
Efficiency Factor	51
Payment to Pension Trust	52
Capital Investment and Capitalisation	52
Depreciation	54
Advance Against Depreciation	55
Return on Capital Employed	56
Working Capital Requirement	56
Regulated Rate Base	57
Means of Finance	59
Determination of WACC and RoCE	61
Capitalisation of Expenses & Interest Charges	62
Rebate on Transmission/ Wheeling of Power	64
Non Tariff Income (NTI)	64
Revenue from Other Charges	65
AGGREGATE REVENUE REQUIREMENT	65
A4: TRANSMISSION TARIFF DESIGN	69
TRANSMISSION TARIFF DESIGN AND ALLOCATION	69
Sample Bill for Monthly Transmission Charges	70
A5: DIRECTIVES	71

LIST OF TABLES

TABLE 1: MEETINGS OF COORDINATION FORUM	10
TABLE 2: LIST OF CORRESPONDENCE WITH DTL	13
TABLE 3: ADDITIONAL CONTRIBUTION TO THE FUND (RS CR)	17
TABLE 4: TERMINAL BENEFITS AS ON 31.03.2011 (RS CR)	17
TABLE 5: ARR AS PER SUBMISSION OF DTL (RS CR)	22
TABLE 6: PRIOR POWER PURCHASE LIABILITY (RS CR)	23
TABLE 7: ADDITIONAL COST ALLOWED TO IPGCL AND PPCL (RS CR)	25
TABLE 8: ADDITIONAL POWER PURCHASE COST APPROVED BY THE COMMISSION (RS CR)	25
TABLE 9: APPROVED ADDITIONAL POWER PURCHASE LIABILITY FOR PAST PERIOD (RS CR)	27
TABLE 10: APPROVED ADDITIONAL POWER PURCHASE LIABILITY FOR PAST PERIOD (RS CR)	28
TABLE 11: POWER PURCHASE COST FOR FY 2005-06 AND RLDC/UDLC CHARGES FOR 2002-07 (RS CR)	32
TABLE 12: NET IMPACT OF ATE'S JUDGMENT IN APPEAL NO. 133/07 & 28/08 AND ADDITIONAL POWER PURCHASE LIABILITY AS APPROVED BY THE COMMISSION (RS CR)	33
TABLE 13: PROPOSED AMOUNT DUE TO CORRECTION OF INFLATION-LINKED INDEX	33
TABLE 14: ACTUAL CPI AND WPI	36
TABLE 15: PROJECTED CPI AND WPI DURING THE CONTROL PERIOD	36
TABLE 16: ESCALATION FACTOR FOR THE CONTROL PERIOD	37
TABLE 17: REVISED EMPLOYEE AND A&G EXPENSES (RS CR)	37
TABLE 18: IMPACT OF WAGE REVISION AS SUBMITTED BY THE PETITIONER (RS CR)	38
TABLE 19: REVISED EMPLOYEE EXPENSES FOR FY 2005-06 AND FY 2006-07 (RS CR)	39
TABLE 20: IMPACT OF WAGE REVISION ON EMPLOYEE COST APPROVED BY THE COMMISSION (RS CR)	39
TABLE 21: ADDITIONAL AMOUNT APPROVED ON ACCOUNT OF REVISION OF BASE EMPLOYEE COST (RS CR)	39
TABLE 22: ADDITIONAL AMOUNT ALLOWED FOR 'NEW ALLOWANCES' (RS CR)	40
TABLE 23: ADDITIONAL AMOUNT ALLOWED ON WAGE REVISION (RS CR)	40
TABLE 24: APPROVED ARREARS AND INCREASE IN EMPLOYEE COST (RS CR)	41
TABLE 25: REVISED EMPLOYEE EXPENSES FOR FY 2007-08 TO FY 2010-11 (RS CR)	41
TABLE 26: ADDITIONAL R&M EXPENSES ALLOWED ON ACCOUNT OF GIS (RS CR)	43
TABLE 27: EMPLOYEE EXPENSES SUBMITTED BY THE PETITIONER FOR THE CONTROL PERIOD (RS CR)	49
TABLE 28: APPROVED EMPLOYEE EXPENSES FOR FY 2011-12 (RS CR)	49
TABLE 29: A&G EXPENSES SUBMITTED BY THE PETITIONER FOR THE CONTROL PERIOD (RS CR)	50
TABLE 30: APPROVED EMPLOYEE EXPENSES FOR THE CONTROL PERIOD (RS CR)	50
TABLE 31: R&M EXPENSES SUBMITTED BY THE PETITIONER FOR THE CONTROL PERIOD (RS CR)	51
TABLE 32: APPROVED R&M EXPENSES FOR THE CONTROL PERIOD (RS CR)	51
TABLE 33: APPROVED O&M EXPENSES FOR THE CONTROL PERIOD (RS. CR)	51
TABLE 34: CAPITALISATION (RS CR)	53
TABLE 35: APPROVED CAPITALISATION FOR THE CONTROL PERIOD (RS CR)	54
TABLE 36: DEPRECIATION AS SUBMITTED BY THE PETITIONER (RS CR)	54
TABLE 37: DEPRECIATION APPROVED BY THE COMMISSION FOR THE CONTROL PERIOD (RS CR)	54
TABLE 38: AAD SUBMITTED BY DTL (RS CR)	55
TABLE 39: AAD APPROVED BY COMMISSION FOR THE CONTROL PERIOD (RS CR)	55
TABLE 40: WORKING CAPITAL SUBMITTED BY THE PETITIONER FOR THE CONTROL PERIOD (RS CR)	56
TABLE 41: APPROVED WORKING CAPITAL FOR THE CONTROL PERIOD (RS CR)	57
TABLE 42: PROPOSED RRB FOR THE CONTROL PERIOD (RS CR)	58
TABLE 43: APPROVED RRB FOR THE CONTROL PERIOD (RS CR)	59
TABLE 44: APPROVED DEBT REQUIREMENT FOR THE CONTROL PERIOD (RS CR)	60
TABLE 45: APPROVED LOAN DETAILS (OUTSTANDING) (RS CR)	60
TABLE 46: PROPOSED ROCE FOR THE CONTROL PERIOD (RS CR)	61
TABLE 47: APPROVED ROCE FOR THE CONTROL PERIOD (RS CR)	62
TABLE 48: SUBMITTED CAPITALISATION OF INTEREST AND OTHER EXPENSES (RS. CR)	63
TABLE 49: EXPENSE CAPITALISATION APPROVED NOW FOR THE CONTROL PERIOD (RS CR)	64
TABLE 50: NON TARIFF INCOME SUBMITTED BY THE PETITIONER (RS CR)	65
TABLE 51: APPROVED NON-TARIFF INCOME FOR THE CONTROL PERIOD (RS CR)	65

TABLE 52: ARR FOR THE CONTROL PERIOD (RS CR)	66
TABLE 53: ADDITIONAL AMOUNT ALLOWED ON ACCOUNT OF REVISION IN ARR FROM FY 2007-08 TO FY 2010-11 INCLUDING CARRYING COST (RS CR)	66
TABLE 54: APPROVED ARR FOR THE CONTROL PERIOD (RS CR)	68
TABLE 55: APPROVED ARR FOR FY 2011-12 (RS CR)	69
TABLE 56: SAMPLE BILL FOR CALCULATING THE MONTHLY TRANSMISSION CHARGES	70

LIST OF ABBREVIATIONS

Abbreviation	Explanation
A&G	Administrative and General
AAD	Advance Against Depreciation
ARR	Aggregate Revenue Requirement
AT&C	Aggregate Technical and Commercial
ATE	Appellate Tribunal for Electricity
ATSC	Annual Transmission Service Charge
BBMB	Bhakra Beas Management Board
BPTAs	Bulk Power Transmission Agreements
BRPL	BSES Rajdhani Power Limited
BYPL	BSES Yamuna Power Limited
CCA	City Compensatory Allowance
CERC	Central Electricity Regulatory Commission
CPI	Consumer Price Index
CPSUs	Central Public Sector Undertaking
CWIP	Capital Work in Progress
DDA	Delhi Development Authority
DERA	Delhi Electricity Reform Act
DERC	Delhi Electricity Regulatory Commission
DIAL	Delhi International Airport Limited
DISCOMs	Distribution Companies (BRPL, BYPL & NDPL)
DMRC	Delhi Metro Rail Corporation
DPCL	Delhi Power Corporation Limited
DSSDIP	Delhi State Spatial Data Infrastructure Projects
DTL	Delhi Transco Limited
DVB	Delhi Vidyut Board
FPA	Fuel Price Adjustment
GFA	Gross Fixed Assets
GFA	Gross Fixed Assets
GoNCTD	Government of National Capital Territory of Delhi
GTPS	Gas Turbine Power Station
HRA	House Rent Allowance
IDC	Interest During Construction
IPGCL	Indraprastha Power Generation Company Limited
LPSC	Late Payment Surcharge
LTC	Leave Travel Concession
MCD	Municipal Corporation of Delhi
MES	Military Engineering Service
MU	Million Units

Abbreviation	Explanation
MYT	Multi Year Tariff
NCT	National Capital Territory
NDMC	New Delhi Municipal Corporation
NDPL	North Delhi Power Limited
NHPC	National Hydroelectric Power Corporation
NRPC	Northern Region Power Committee
NTI	Non Tariff Income
NTP	National Tariff Policy
NTPC	National Thermal Power Corporation
O&M	Operations and Maintenance
OEM	Original Equipment Manufacturer
PGCIL	Power Grid Corporation of India
PPA	Power Purchase Agreement
PPCL	Pragati Power Corporation Limited
PPCL	Pragati Power Corporation Limited
R&M	Repair and Maintenance
RLDC	Regional Load Despatch Centre
RoCE	Return on Capital Employed
RRB	Regulated Rate Base
RTI	Right to Information
SERC	State Electricity Regulatory Commission
SJVNL	Satluj Jal Vidyut Nigam Limited
SLDC	State Load Despatch Centre
TPA	Transport Allowance
UI	Unscheduled Interchange
ULDC	Unified Load Despatch Centre
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 Delhi Transco Limited (hereinafter referred to as 'DTL' or 'TRANSCO' or 'the Petitioner') for determination of ARR and transmission tariff for the FY 2011-12.
- 1.2 Before 2001, Delhi Vidyut Board (hereinafter referred to as 'DVB') was the sole entity handling all functions of generation, transmission and distribution of electricity in the National Capital Territory of Delhi. However, the Government of National Capital Territory of Delhi (hereinafter referred to as 'GoNCTD') notified the Delhi Electricity Reform (Transfer Scheme) Rules, 2001 (hereinafter referred to as 'Transfer Scheme') on November 20, 2001 and provided for unbundling of the functions of DVB into different entities handling generation, transmission and distribution of electricity.
- 1.3 The Transfer Scheme provided for transfer of existing transmission assets of DVB to Delhi Transco Limited (formerly known as Delhi Power Supply Company Limited)

Delhi Transco Limited

- 1.4 The Delhi Transco Limited is a company incorporated under the Companies Act, 1956. DTL was entrusted with the business of procurement, transmission and bulk supply of electricity in the specified area of National Capital Territory of Delhi (as specified in the Transfer Scheme), upto March 31, 2007.
- 1.5 On June 28, 2006, GoNCTD issued Policy Directions for making power supply arrangements in Delhi from April 1, 2007. These Policy Directions were issued under Section 108 of the Electricity Act 2003 and stated the following:
- (a) With effect from April 1, 2007, the responsibility for arranging supply of power in the NCT of Delhi shall rest with the Distribution licensees in accordance with the provisions of the Electricity Act, 2003, and also the National Electricity Policy. The DERC may initiate all measures well in advance so that necessary arrangements are put in place.
 - (b) With effect from April 1, 2007, the Delhi Transco Limited will be a Company engaged in only wheeling of power and also operate the State Load Despatch Centre (SLDC) in accordance with the mandate of the Government of NCT of Delhi.
 - (c) The DERC would have to make arrangements on the various existing Power Purchase Agreements between the present Distribution licensees in a manner to take care of different load profiles of the Distribution licensees, the New Delhi Municipal Council (NDMC) and also the Military Engineering Services (MES).

- (d) While addressing the issue of transiting to the new arrangements in which the Distribution licensees would trade in power, specific Orders may be issued by DERC for ensuring that there is no disruption in the transmission network.
- 1.6 Thus, the business of Bulk Supply of electricity is no longer a part of the business of the Petitioner, and the same is vested with the distribution licensees (DISCOMs) of the State, w.e.f. April 1, 2007.
- 1.7 The Power Purchase Agreements (PPAs)/ Bulk Power Transmission Agreements (BPTAs) of the existing and upcoming projects were assigned to the distribution licensees vide the Commission's Order dated March 31, 2007.

Delhi Electricity Regulatory Commission (DERC)

- 1.8 The Delhi Electricity Regulatory Commission (hereinafter referred to as 'DERC' or 'Commission') was constituted by the Government of National Capital Territory of Delhi on March 3, 1999 and it became operational from December 10, 1999.
- 1.9 The Commission's approach to regulation is driven by the Electricity Act 2003, the National Electricity Plan, the National 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.

Functions of the Commission

- 1.10 The Commission derives its powers from DERA as well as the Act. The major functions assigned to the Commission under the DERA are as follows:
- (a) to determine the tariff for electricity, wholesale, bulk, grid or retail and for the use of the transmission facilities;
 - (b) to regulate power purchase, transmission, distribution, sale and supply;
 - (c) to promote competition, efficiency and economy in the activities of the electricity industry in the National Capital Territory of Delhi;
 - (d) to aid and advise the Government on power policy;
 - (e) to collect and publish data and forecasts;
 - (f) to regulate the assets and properties so as to safeguard the public interest;
 - (g) to issue licenses for transmission, bulk supply, distribution or supply of electricity;
 - (h) to regulate the working of the licensees; and

- (i) to adjudicate upon the disputes and differences between licensees.

1.11 The functions assigned to the Commission under the Act are as follows:

- (1) "Section 86. The State Commission shall discharge the following functions, namely: -
- (a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
 - (b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
 - (c) facilitate intra-state transmission and wheeling of electricity;
 - (d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
 - (e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
 - (f) adjudicate upon the disputes between the licensees and generating companies and to refer any dispute for arbitration;
 - (g) levy fee for the purposes of this Act;
 - (h) specify State Grid Code consistent with the Grid Code specified under clause (h) of sub-section (1) of section 79;
 - (i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
 - (j) fix the trading margin in the intra-state trading of electricity, if considered, necessary;
 - (k) discharge such other functions as may be assigned to it under this Act.

- (2) The State Commission shall advise the State Government on all or any of the following matters, namely: -
- (a) promotion of competition, efficiency and economy in activities of the electricity industry;
 - (b) promotion of investment in electricity industry;
 - (c) reorganisation and restructuring of electricity industry in the State;
 - (d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.”

1.12 As part of the tariff related provisions of the Act, the State Electricity Regulatory Commission (SERC) has to be guided by the National Electricity Policy, National Tariff Policy and the National Electricity Plan.

The Coordination Forum

- 1.13 The Commission wrote to Government of NCT of Delhi (GoNCTD) on April 1, 2005 to constitute the Coordination Forum consisting of the Chairperson of the State Commission and the Members thereof, representatives of the generating companies, transmission licensees, and distribution licensees engaged in generation, transmission and distribution etc. in accordance with section 166(4) of the Electricity Act, 2003.
- 1.14 Accordingly, the GoNCTD vide Notification No. F.11/36/2005/Power/1789 dated 16.06.2005 constituted the Coordination Forum, comprising of Chairperson and Members of DERC, CMD of DTL, Managing Director of IPGCL/PPCL, CEOs of NDPL, BYPL and BRPL with Secretary, DERC as the Member Secretary. Since the Committee constituted did not include NDMC and MES, who also distribute power in Delhi, the Commission had decided to invite them for all the meetings. The Commission has since held 23 meetings on the following dates :

Table 1: Meetings of Coordination Forum

Meeting	Date
1st Meeting	August 29, 2005
2nd Meeting	October 25, 2005
3rd Meeting	December 20, 2005
4th Meeting	January 20, 2006
5th Meeting	March 1, 2006
6th Meeting	April 17, 2006
7th Meeting	May 15, 2006
8th Meeting	June 14, 2006

Meeting	Date
9th Meeting	August 23, 2006
10th Meeting	September 28, 2006
11th Meeting	November 22, 2006
12th Meeting	January 25, 2007
13th Meeting	March 15, 2007
14th Meeting	April 16, 2007
15th Meeting	October 23, 2007
16th Meeting	November 23, 2007
17th Meeting	August 13, 2009
18th Meeting	October 12, 2009
19th Meeting	November 12, 2009
20th Meeting	December 18, 2009
21st Meeting	February 19, 2010
22nd Meeting	October 1, 2010
23rd Meeting	January 19, 2011

- 1.15 In the Co-ordination forum meeting held on January 19, 2011, the DTL/SLDC informed that Grid Coordination Committee has already reviewed Delhi Grid Code 2008 and recommended the amendments considering the views of all the members i.e. Distribution Licensees, IPGCL/PPCL. The Commission directed the DTL/SLDC to finalise the amendments to enable the Commission to notify the amended grid code expeditiously.

Multi Year Tariff Regulations and Extension of the Control Period

- 1.16 The Commission issued a Consultative Paper and Draft MYT Regulations for Generation, Transmission and Distribution to all concerned stakeholders, including the Government, the Generation Companies, Transmission and Distribution Licensees, consumers, etc. These documents detailed the principles, approach and methodology to be adopted for the determination of tariff for various entities under the MYT framework and also highlighted the various issues which were to be discussed and finalized for successful implementation of the MYT principles.
- 1.17 These Draft Regulations and MYT Consultative Paper were issued on October 11, 2006 and a notice to this effect was published in leading newspapers seeking comments from public and stakeholders.
- 1.18 The Commission issued Regulations vide notification dated May 30, 2007 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 2007-08 to FY2010-11.

- 1.19 The Commission vide its Order dated May 10, 2011 extended the MYT Regulations and the Control Period for a further period of one year upto March 31, 2012 after following the prescribed due process of law.

Filing of Petition for Approval of ARR for FY 2011-12

Filing of Petition

- 1.20 DTL has filed its petition before the Commission on April 7, 2011 for approval of Aggregate Revenue Requirement (ARR) and determination of Transmission Tariff for FY 2011-12 under Section 62, 64 and 86 of the Electricity Act, 2003, read with the MYT Regulations, 2007.

Acceptance of Petition

- 1.21 The Commission admitted the petition for approval of Aggregate Revenue Requirement (ARR) and determination of Transmission Tariff for FY 2011-12 vide its Order dated May 4, 2011 subject to clarifications, if any, which would be obtained from the Petitioner from time to time. A copy of the Admission Order dated May 4, 2011 is enclosed as **Annexure I** to this Order.

Interaction with the Petitioner

- 1.22 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.
- 1.23 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.
- 1.24 The role of the Commission has been 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.
- 1.25 The Commission interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the tariff petition. The Commission and the Petitioner also discussed key issues related to the petition.

- 1.26 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.
- 1.27 The Petitioner submitted its replies, as shown below, in response to the queries raised by the Commission in these sessions, which have been considered during approval of the Aggregate Revenue Requirement of the Petitioner.

Table 2: List of Correspondence with DTL

S No	Date	Letter No.	Subject
1	06.04.2011	F.DTL/203/F-1/10-11/Opr.GM(Comml)/02	Filing of Petition for approval of Aggregate Revenue Requirement & applicable Tariff for Wheeling Business for the FY 2011-12
2	20.05.2011	F.DTL/203/10-11/Opr(Comml)/F-1/39	Reply of letter No. F.11(690)/DERC/2010-11/501 dt. 04.05.2011 in petition no. 35/2011 for the petition for approval of ARR for FY 2011-12.
3	26.05.2011	F/DTL/207/GM(SLDC)/2011-12/F45/52	Energy purchase date for 2009-10 and 2010-11
4	30.05.2011	F.DTL/203/F-1/10-11/Opr.GM(Comml)/49	Information as desired by the Hon'ble Commission in its technical validation session on 23.05.2011 on ARR Petition filed by DTL for FY 2011-12
5	13.06.2011	GM(Commercial)/F-1/74	Details/information required by Hon'ble Commission vide e-mail dated 03.06.2011 on ARR Petition for FY 2011-12 filed by DTL
6	22.06.2011	DTL/203/F-1/2011-12/Opr.GM(Comml)/88	----
7	24.06.2011	F.DTL/203/10-11/Opr(Comml)/F-1/90	Information regarding treatment of interest capitalized in computation of ARR
8	07.07.2011	GM(Comml)/F-1/101	Payment of bills by DISCOMs for the period prior to 1st April, 2007
9	12.07.2011	DTL/DGM(Fin.)I/310/2011-12/38	Additional clarification/submissions regarding Tariff Petitions of DTL
10	13.07.2011	GM(Comml)/F-1/103	Submission of additional information required on 11.07.2011
11	15.07.2011	F.DTL/DGM(Fin.)I/310/2011-12	Additional clarifications/submissions regarding Tariff Petitions of DTL
12	19.07.2011	F.DTL/203/F-1/2011-12/Opr.GM(Comml.)/107	Information required vide Commission's letter dated 13.07.2011
13	22.07.2011	F.DTL/207/GM(SLDC)/2011-12/134	Reconciled Energy Data required vide Commission's letter dated 15.07.2011
14	29.07.2011	F.DTL/207/GM(Comml)/F-1/112	Submission of Additional Information required on ARR Petition filed for FY 2011-12

Public Hearing

- 1.28 The Petitioner published a Public Notice on May 11, 2011 indicating the salient features of its petition, for inviting responses from the stakeholders, in the following newspapers:

- (a) Hindustan Times (English)

- (b) Rashtriya Sahara (Hindi)
 - (c) Dainik Jagran (Hindi)
 - (d) Siyasi Ufuque (Urdu)
 - (e) Daily Educator (Punjabi)
- 1.29 Copies of the Public Notice in English, Hindi, Punjabi and Urdu are enclosed as **Annexure II** to this Order. A detailed copy of the petition was also made available for purchase from the head-office of the Petitioner on any working day from May 12, 2011 to May 27, 2011, between 11 A.M. and 4 P.M. on payment of Rs 100/-. A complete copy of the petition was also made available on the website of the Commission, as well as that of the Petitioner, requesting for comments of the stakeholders thereon.
- 1.30 The Commission also published a Public Notice on May 13, 2011 inviting comments from stakeholders on the petitions filed by the petitioner in the following newspapers:
- (a) The Times of India (English)
 - (b) Hindustan Times (English)
 - (c) Nav Bharat Times (Hindi)
 - (d) The Daily Milap (Urdu)
 - (e) Daily Educator (Punjabi)
- 1.31 Interested consumers and other stakeholders were requested to file their objections and suggestions on the petition by May 31, 2011. Copies of the above Public Notice in English, Hindi, Punjabi and Urdu are attached as **Annexure III** to this Order.
- 1.32 The Petitioner/Commission received comments from five stakeholders. The Petitioner responded to the comments of the stakeholders and submitted a copy of its response to the Commission. The Commission invited all stakeholders who had filed their objections and suggestions to attend the Public Hearing. The list of stakeholders who responded to the public notice on ARR and tariff petitions and those who attended the public hearing is provided as **Annexure IV** to this Order.
- 1.33 The public hearing was held at the Commission's Court Room on July 1, 2011 at 10.30 AM to discuss the issues related to the petition filed by the Petitioner for approval of ARR and Transmission Tariff for FY 2011-12.
- 1.34 The issues and concerns voiced by various stakeholders have been examined by the Commission. The major issues discussed during the public hearing and views of the Commission, have been summarized in Chapter A2 of this Order.

Layout of the Order

1.35 This Order is organised into five Chapters:

- (a) Chapter A1 provides details of the tariff setting process and the approach of the Order;
- (b) Chapter A2 provides a detailed account of the Public Hearing process, including the comments of various stakeholders, the Petitioner's responses and views of the Commission;
- (c) Chapter A3 analyses the Aggregate Revenue Requirement and Transmission tariff for FY 2011-12; and
- (d) Chapter A4 contains the Summary of the Transmission Tariff for DTL.
- (e) Chapter A5 details the Directives of the Commission.

1.36 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 Licensee;
- (c) Annexure III – Copies of Public Notice published by the Commission;
- (d) Annexure IV – List of Respondents.

A2: RESPONSES FROM STAKEHOLDERS

Introduction

- 2.1 Public hearing being a platform to understand the problems and concerns of various stakeholders, the Commission has always encouraged transparent and participative approach in the hearings, which are used to obtain necessary inputs required for tariff determination.
- 2.2 The public hearing was held in the office of the Commission on July 1, 2011, wherein stakeholders put forth their comments/suggestions before the Commission in the presence of the Petitioner.
- 2.3 The Commission has examined the issues and concerns voiced by various stakeholders in their written comments as well as in the Public hearing and also the response of the petitioner thereon. The comments/ suggestions submitted by various stakeholders in response to the ARR petition, the replies given by the Petitioner and the views of the Commission have been summarized under various sub-heads as below:

Payment to DPCL on account of prior period liability

Stakeholder's Comment

- 2.4 DPCL has claimed that a sum of Rs. 276.80 Cr which it had paid to various third parties/contractors and suppliers as per the bills and claims against erstwhile DVB is payable to it by all the successor entities. Utility wise break-up of the same is however still being worked out.

Petitioner's Submission

- 2.5 The Petitioner has submitted that "as per the judgment of the Hon'ble Supreme Court enclosed as **Annexure-A** along with letter of DPCL dated 27th May, 2011, it is a case of meeting the liabilities relating to employees who ceased to be the employees of erstwhile **Delhi Electric Supply Undertaking** (Predecessor of Delhi Vidyut Board – DVB) prior to 1st July, 2002 on account of their retirement, removal, dismissal or compulsory retirement in accordance with the provisions of Delhi Electric Reforms Act, 2002. DPCL has considered the current liability as per enclosed **Annexure-C**, the liability for capital supplies /works, O&M supplies/works, staff related liabilities and provisions, deposits and retention from suppliers and contractors **and other liabilities and provisions amounting to Rs.276.8 crore. In the absence of details of the above mentioned liabilities pertaining to DTL and due to the fact that no demand has been raised by the DPCL till date, we are unable to consider the same.**"

Commission's View

- 2.6 During the Public hearing, DTL submitted that DPCL has not raised any demand on account of prior period liability as the detailed break-up of the claim is yet to be worked out for various utilities. The Commission is of the view that the claim of DPCL is premature and does not require consideration at this stage.

Payment to Pension Trust**Stakeholder's View**

- 2.7 Stakeholders have claimed that the successor entities of the erstwhile DVB are liable to make payment to the Pension Trust on account of:
- Actuarial Revaluation of the Fund (total amount to be paid – Rs 1315 Cr).
 - 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. The details of the same are given below:

Table 3: Additional Contribution to the fund (Rs Cr)

	DTL	IPGCL	BRPL	BYPL	NDPL	Total
Additional Contribution to the Fund*	119.67	159.51	399.10	326.91	309.81	1315.00

Table 4: Terminal Benefits as on 31.03.2011 (Rs Cr)

	DTL	IPGCL	BRPL	BYPL	NDPL	Total
Amount Claimed by Trust for FY11*	16.84	21.84	79.68	65.27	61.85	245.48
Amount Claimed by Trust for FY12*	24.28	32.35	80.95	66.31	62.84	266.73
Claimed in Petition for FY11**	26.98	32.18	0	0	0	0
Claimed in Petition for FY12**	50.00	32.35	0	0	0	0

* As per representation received from Pension Trust **As per petition

Petitioner's Submission

- 2.8 With regard to the first claim (refer Table 3) raised by the stakeholders the Petitioner has stated that *"in terms of the provisions of the para 4 (b) of part-III Trust Deed the additional contributions based on actuarial valuation can be raised in consultation with the GNCTD. The Actuarial Valuation based on which the additional demands were raised by Pension Trust vide letter No. F.PT/102/F.9/09-10/M/PT/171 dated 15.12.2009 was not approved by GNCTD and therefore no action against the said demand has been taken by DTL."*
- 2.9 As regards to the second claim (refer Table 4) the Petitioner has stated that *"as per details mentioned in the table DTL has to pay Rs. 26.98 crores on account of medical,*

LTC and pension arrears. Accordingly DTL has claimed the same amount in employee cost considered for FY 2010-11 in the true up petition filed."

Commission's View

- 2.10 The Commission has considered the submissions made by Secretary (Pension Trust) and CEO's of the DISCOMs at length. The Commission also examined the relevant provisions of the Transfer Scheme Rules, 2001, Tripartite Agreement entered amidst GoNCTD, DVB and association of Union of the officers and employees of the erstwhile DVB, Trust Deed, Pension Trust and the record pertaining to the Civil Writ Petition (C) No 1698/2010 filed by Delhi State Electricity Workers Union before the Hon'ble High Court of Delhi.
- 2.11 The Commission noticed that shortfall of the fund in the Pension Trust is the main issue in the said Writ Petition. At the present matter is sub-judice. The Commission also observes that Pension Trust is facing acute shortage of fund and is left with the meagre fund just sufficient to meet its obligation towards the pensioners for another 5 to 6 months only.
- 2.12 In view of the above and to avoid any undue hardship to the retired employees (pensioners) of the erstwhile DVB, the Commission has considered providing a provisional lump sum amount of Rs 150 Cr in the ARR of the DTL for FY 2011-12 subject to the final outcome in the Civil Writ Petition (C) No 1698/2010.
- 2.13 The Commission further directs DTL to transfer this amount of Rs 150 Cr to the Pension Trust and also maintain a separate record of payment made to Pension Trust.

Impact of Appeal No 133/2007

Stakeholder's Comment

- 2.14 The stakeholders have argued that pending the Appeal in Supreme Court against the Orders of the ATE in Appeal No. 133/2007, additional amounts allowed by the Hon'ble ATE in its Order should not be considered.

Petitioner's Submission

- 2.15 The Petitioner has submitted that since no stay has been granted by the Hon'ble Supreme Court the same should be allowed.

Commission's View

- 2.16 The Commission is of the view that the additional amount on the issues where appeal is pending before the Hon'ble Supreme Court shall be considered once the matter is decided by the Hon'ble Supreme Court.

O&M Expenses

Stakeholder's Comment

- 2.17 The stakeholders have submitted that it has been observed that Delhi's total power requirement in the year FY 2006-07 was 24629 MU and in FY 2009-10 its requirement was 24125 MU which shows decline in consumption. However, the O&M expenses have increased manifold. O&M expenses in FY 2006-07 were Rs.82.25 Cr and in FY 2011-12 they are Rs.231.08 Cr. Therefore the licensee has not made any effort to improve its efficiency.

Petitioner's Submission

- 2.18 The Petitioner has submitted that "*O&M cost basically consists of employee expenses, A&G expenses and R&M expenses. As per Regulation, employee expenses and A&G expenses depends on Consumer Price Index and Wholesale Price Index announced by Govt. whereas R&M cost considered on the basis of gross fixed assets of transmission licensee. Moreover, there is no relevancy of O&M cost with the MUs wheeled through the system.*"

Commission's View

- 2.19 The Commission has allowed O&M Expenses for the Petitioner in accordance with the MYT Regulations, 2007 duly extended for one more year up to March 31, 2012.

R&M Expenses

Stakeholder's Comment

- 2.20 While calculating the R&M expenses the Petitioner has considered the GFA of the nth year which is only a projected figure only. As per Regulation the GFA should be considered for the (n-1)th year and according to the latest available data. If (n-1)th year is considered, the R&M expenses will be Rs.26.74 Cr not Rs.57.07 Cr. Moreover the Base Year O&M expenses shall be approved by the Commission taking into account the latest available audited account. The Tariff Regulation further defined the Base year as the financial year immediately preceding first year of the Control Period and used for purpose of Regulation. The GIS expenditure is not admissible as per Tariff regulation therefore cannot be considered.

Petitioner's Submission

- 2.21 The Petitioner has replied that "*R&M cost has been computed as per formula mentioned in the MYT Regulation and GIS expenses is considered as per judgement passed by Hon'ble ATE in appeal No.28/2008.*"

Commission's View

- 2.22 The Commission has observed that the GIS equipment installed at Park Street and Kashmere Gate stations of the Petitioner is 17 years and 14 years old respectively. There had been no overhaul of the equipment since it was installed, more than 10 years ago and hence overhauling had to be done on priority basis through the OEM.
- 2.23 The Commission had allowed R&M expenses for the MYT Control Period using the following formula:

$$R\&Mn = 2.19\% * GFA_{n-1}$$

- 2.24 Since the capital cost of the GIS equipment is included in the GFA considered for calculating the R&M expenses, ideally, the additional expenditure should not have been allowed to the Petitioner now. However, it was also noted that the ratio 2.19% (or the K factor) was determined by the Commission on the basis of the average K factor observed for the Petitioner during FY 2002-03 to FY 2006-07, the period during which no overhauling was carried out for the above two GIS sub-stations.
- 2.25 Considering the extraordinary nature of the expenditure and that no further overhauling is expected to be carried out during the next 10 years, the Commission has allowed the additional R&M expenses. At the same time, to avoid additional burden on the consumer in a single year, the expenditure has been amortised over five years from FY 2010-11 to FY 2014-15, along with the appropriate carrying cost @ 11.5% per annum.

Deposit Works**Stakeholder's Comment**

- 2.26 The stakeholders have argued that the petitioner did not submit the details of deposit works completed during 2009-10 and 2011. During that period many works executed by the licensee for common Wealth Games, DDA, MCD, NDMC, DIAL, DMRC, PWD/CPWD etc. The Petitioner is not eligible for Return on Capital employed on the Deposit works.

Petitioner's Submission

- 2.27 The Petitioner has submitted that *"the details are already available in the MYT ex facto true up petition filed by the DTL before the Commission on 31.3.2011 and also in ARR petition for 2010-11."*

Commission's View

- 2.28 As per the MYT Regulations, true up of the RoCE and depreciation shall be done by the Commission at the end of the Control Period. The Commission has extended the

control period for one more year up to March 31, 2012 and hence the Commission shall true up the ROCE and Depreciation at the end of the extended Control Period.

True Up

Stakeholder's Comment

- 2.29 As per the provisions of Tariff Regulations the controllable parameters are to be trued up at the end of the extended Control Period. Since the Control Period has been extended up to March 31, 2012, therefore the true up of ARR should be carried out in subsequent years and not right now.

Petitioner's Submission

- 2.30 The Petitioner in response to the above objection has stated that *"As per provision in the tariff Regulation, controllable parameters are to be trued up at the end of Control Period which is now extended up to 31.3.12, but the DTL has filed its True up petition for the first Control Period as per the Judgement passed by Hon'ble ATE on 29.9.2010 in Appeal No.28/08 in which ATE directed Hon'ble Commission to consider the true up even before the end of Control Period."*

Commission's View

- 2.31 The Commission did not admit the petition for True Up filed by the Petitioner as the Commission has extended the Control Period for one more year up to March 31, 2012. Accordingly, the True Up for the Control Period shall be carried out at the end of the extended Control Period.

A3: ANALYSIS OF AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2011-12

Introduction

- 3.1 The Commission has analysed the petition submitted by the Petitioner for approval of Aggregate Revenue Requirement and determination of Transmission Tariff for FY 2011-12.
- 3.2 The Commission held multiple technical validation sessions to validate the data submitted by the Petitioner and sought further clarifications on various issues. The Commission has considered all the information submitted by the Petitioner as part of the tariff petition, responses to various queries raised during the discussions and also during the public hearing, for determination of ARR.
- 3.3 In the present petition, the Petitioner has also requested for true-up of FY 2007-08 to FY 2010-11 along with approval of ARR for FY 2011-12. A brief summary of the revised ARR as claimed by the Petitioner for FY 2007-08 to FY 2010-11 and ARR for FY 2011-12 is shown in the table below:

Table 5: ARR as per submission of DTL (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Total Expenditure	130.77	141.45	223.25	261.64	343.04
Return on Capital Employed	90.45	98.91	98.87	185.97	319.03
Less: Other Revenue	2.44	2.87	2.51	2.61	2.61
Less: Non Tariff Income	1.37	5.68	4.94	2.57	2.50
Aggregate Revenue Requirement	217.42	231.80	314.68	442.43	656.96

- 3.4 The Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012 and it shall carry out true up for each year of the Control Period only at the end of the extended Control Period. The Commission vide its Order dated May 4, 2011 admitted the petition for approval of ARR for FY 2011-12.
- 3.5 While the Commission shall carry out true up for each years of the Control Period (FY 2007-08 to FY 2011-12) at the end of the extended Control Period, it has decided to allow additional expenses to the Petitioner on account of the Orders of the Hon'ble Appellate Tribunal of Electricity (hereinafter referred to as "ATE") in Appeal No 133/2007 and 28/2008, (on issues which have not been appealed in the Hon'ble Supreme Court), and additional power purchase liability for the Policy Direction Period (FY 2002-03 – FY 2006-07).

- 3.6 This Chapter contains detailed analysis of the petition submitted by the Petitioner and the various parameters approved by the Commission for determination of Transmission Tariff for the Petitioner for FY 2011-12.

Additional Power Purchase Liability and Impact of ATE Orders for Policy Direction Period (FY 2002-03 – FY 2006-07)

Additional Power Purchase Liability for Policy Direction Period

Petitioner's Submission

- 3.7 The Petitioner has submitted that it is obliged to pay the revised power purchase bills of CPSUs for period prior to March 2007 due to the liabilities which have been raised by the CPSUs as per the Orders of ATE / Central Electricity Regulatory Commission (CERC) for revised power tariffs in respect of stations of NHPC, NTPC, BBMB, SJVNL & others, arbitration award passed by NRPC (Northern Region Power Committee) in favour of Himachal Pradesh State Electricity Board (HPSEB) etc. Since all these amounts pertain to the transactions of bulk power purchase made by the Petitioner before April 1, 2007 these are required to be allowed to the Petitioner in the ARR.
- 3.8 The total amount on this account, upto March 2011, was submitted as Rs.205.86 Cr in the tariff petition. In the additional information submitted to the Commission, the total liability was revised to Rs 228.87 Cr on account of additional power purchase bills received by the Petitioner. The Petitioner has also requested surcharge to be allowed (@ 1.25% p.m.) on the above amount. The summary of additional power purchase cost, plus surcharge, as submitted by the Petitioner is given below:

Table 6: Prior Power Purchase Liability (Rs Cr)

Particulars	Amount	Months	Surcharge	Total
Revised Power Purchase Accounted in 2007-08	-21.42	36	-9.64	-31.05
Revised Power Purchase Accounted in 2008-09	135.79	24	40.74	176.52
Revised Power Purchase Accounted in 2009-10	46.77	12	7.02	53.79
Revised Power Purchase Accounted in 2010-11	67.73*			67.73
	228.87		38.12	266.99

*Bills received till May 25, 2011

Commission's Analysis

- 3.9 During the Policy Direction Period, the Petitioner was responsible for the bulk power purchase for all distribution licensees. Since power purchase cost is an uncontrollable expense and the CPSUs have raised additional bills on account of power purchase for Policy Direction Period, the Petitioner is entitled to recover the additional power purchase liability.

- 3.10 During the technical validation sessions, the Commission requested the Petitioner to provide information regarding the additional power purchase liability claimed by it, in respect of the bill amount, bill date, due date, payment date, amount already paid and balance outstanding. The Commission has scrutinized the information provided by the Petitioner, including the audited accounts of the Petitioner for FY 2007-08 to FY 2009-10 and power purchase bills raised by NTPC, NHPC, PGCIL etc.
- 3.11 Based on the scrutiny of the information submitted by the Petitioner, the Commission has made certain observations and has given the following treatment to the additional power purchase liability for each year from FY 2007-08 to FY 2009-10:
- (a) The Commission in its MYT Order for the Petitioner had trued up power purchase cost for FY 2006-07 based on the annual audited accounts of the Petitioner, which included certain provisions made for
 - (i) Anticipated bills for power purchase in future (but not received during the year)
 - (ii) Amount receivable (refunds) from some generating companies (but not received during the year).
 - (b) The net provision in the audited account for FY 2006-07 on account of anticipated power purchase bills/refunds was Rs 63.96 Cr. As the Commission allowed the power purchase cost to the Petitioner for FY 2006-07 based on the audited accounts, the Commission had therefore allowed Rs 63.96 Cr of power purchase cost over and above the actual power purchase cost incurred by DTL during FY 2006-07. These provisions were utilised by the DTL during FY 2007-08 to FY 2009-10 to make payments against the additional power purchase bills received by it i.e. actual payment was made against these provisions during FY 2007-08 to FY 2009-10. The Commission while allowing the power purchase cost in this Order has not considered any such payment which was made by DTL through provisions made in its audited annual accounts for FY 2006-07.
 - (c) In the audited annual accounts of FY 2007-08 also, certain provisions for anticipated bills for power purchase in future (but not received during the year) or amount receivable (refunds) from certain generating companies (but not received during the year) were made. The actual payment against the provisions for anticipated bills for power purchase was made only in FY 2008-09 and FY 2009-10. Similarly actual refunds against provision for Amount receivable (refunds) from some generating companies was received only in FY 2008-09 and FY 2009-10. The Commission while allowing power purchase cost in this Order, has not considered these provisions and allowed the power purchase cost or refunds received only after the actual bills were raised / refunds received.

- (d) The Petitioner has paid Rs 18.19 lacs as LPSC to NHPC in FY 2009-10. Since no penal interest can be allowed to be claimed in the ARR, the Commission has disallowed this amount and has deducted the same from the total power purchase cost for FY 2009-10.
- (e) Apart from the adjustments on the above mentioned accounts, the Commission has approved the additional power purchase cost as accounted for by the Petitioner in each year from FY 2007-08 to FY 2009-10.
- (f) Further, on scrutiny of the accounts of the Petitioner, it was observed that the Petitioner has received Rs 4.30 Cr as rebate due to timely payment of bills during FY 2007-08 to FY 2009-10. The Commission has deducted the same from the total power purchase liability for the respective years.
- (g) The Commission has also provisionally allowed additional power purchase liability of Rs 67.73 Cr claimed in FY 2010-11 as per the bills submitted by the Petitioner. The same shall be trued up after finalisation of the audited accounts of the Petitioner.
- (h) The Commission, vide its letter dated December 3, 2009, in implementation of the Order of the ATE in Appeal Nos. 81/2007 and 82/2007, had approved additional generation cost (Rs 65 Cr) for FY 2006-07 to the State generating stations – IPGCL and PPCL respectively. The same has been accounted for by the Petitioner as additional power purchase cost during FY 2009-10. While approving the ARR for FY 2011-12 for IPGCL (Rajghat Power House and Gas Turbine Power Station) and PPCL, the Commission has also approved carrying cost on the same. The carrying cost approved on this amount (as shown in the table below) is also payable by the Petitioner and has been included in the power purchase cost.

Table 7: Additional Cost Allowed to IPGCL and PPCL (Rs Cr)

Company	Station	Amount
IPGCL	Rajghat Power House (RPH)	5.31
IPGCL	Gas Turbine Power Station	3.85
PPCL	PPCL-I	1.71
Total		10.87

- 3.12 The power purchase cost computed for each year after making the above adjustments is given in below:

Table 8: Additional Power Purchase Cost Approved by the Commission (Rs Cr)

Particulars	Petitioner's Submission	Amount after Adjustments (A)	Rebate as per accounts (B)	Net Amount (A-B)
Revised Power Purchase for FY 2007-08	-21.41	-15.68	3.63	-19.31
Revised Power Purchase for FY 2008-09	135.79	133.03	0.50	132.53

Particulars	Petitioner's Submission	Amount after Adjustments (A)	Rebate as per accounts (B)	Net Amount (A-B)
Revised Power Purchase for FY 2009-10	46.77	43.62	0.17	43.45
Revised Power Purchase for FY 2010-11	67.73	67.73	-	67.73
Additional Power Purchase Cost on account of Carrying Cost allowed to PPCL and IPGCL				10.87
Total	228.87			235.27

- 3.13 The Commission has already provisionally allowed Rs 117.95 Cr in its tariff Order for FY 2009-10 for the distribution licensees (BYPL, BRPL, NDPL and NDMC) on account of the additional power purchase liability arising for Policy Direction Period. The Petitioner informed the Commission that it has raised the bills regarding the same on all the Distribution licensees in June 2009. The same has been deducted from the total additional power purchase liability approved now.
- 3.14 The Petitioner has also requested for surcharge on the additional power purchase liability @1.25% per month. The Commission is of the view that no penal interest can be allowed to be claimed in the ARR as the Petitioner is required to pay bill on time and the Petitioner shall only be eligible for carrying cost @11.50% per annum on the amount.
- 3.15 The Commission has calculated the carrying cost on additional power purchase in FY 2007-08 and FY 2008-09 taking into account the following:
- For net provision in the audited account for FY 2006-07 on account of anticipated power purchase bills / refunds of Rs 63.96 Cr, the Petitioner is liable to pay back the carrying cost on this amount. Accordingly, a negative carrying cost has been computed on this amount from the date of creation of these provisions till actual payment made by the Petitioner against these provisions. The Petitioner has argued that for calculation of carrying cost, start date should be the true up order of the Commission as it did not receive this additional amount till the true up for FY 2006-07 was carried out. However, the Commission does not agree with the contention of the Petitioner as the Commission considers carrying cost while truing up for any year, so any amount provided by the Commission while truing up, includes carrying cost. Moreover, the Commission had approved a surplus of 196.17 Cr in truing up for FY 2006-07. The total negative carrying cost has been computed as Rs 10.01 Cr.
 - For any power purchase bill (other than those paid using provision created in FY 2006-07) received by the Petitioner during FY 2007-08 and FY 2008-09, the Commission has considered carrying cost from the date of the payment in case bill has been paid on time or due date in case there was delayed payment / no payment till May 2009 as the bill for additional power purchase liability

was approved by the Commission in its May 28, 2009 Order and was raised by the Petitioner in June 2009.

- (c) Similarly, for any amount received from a generating company (refund) during FY 2007-08 and FY 2008-09, a negative carrying cost has been considered from date of receipt till May 2009.
- (d) No carrying cost has been calculated on the provisions made in FY 2007-08 against which no payment has actually been made.
- (e) The total power purchase liability of the Petitioner for FY 2007-08 and FY 2008-09 including rebate as per annual accounts, carrying cost till May 2009 as described above works out to Rs 102.08 Cr against the Rs 117.95 Cr approved in May 2009. Thus an excess amount of Rs 15.87 Cr was approved by the Commission. This excess amount has been adjusted against additional power purchase bills received in FY 2009-10 and FY 2010-11. A negative carrying cost on the excess amount has been calculated from June 2009 till March 2011.
- (f) For any power purchase bill (other than those paid using provision created in FY 2006-07) received by the Petitioner during FY 2009-10 and FY 2010-11, the Commission has considered carrying cost from the date of the payment in case bill has been paid on time or due date in case there was delayed payment / no payment till March 2011.
- (g) Similarly, for any amount received from a generating company (refund) during FY 2009-10 and FY 2010-11, a negative carrying cost has been considered from date of receipt till March 2011.

3.16 The total power purchase cost computed for each year, including the carrying cost as explained above is given in the table below.

Table 9: Approved Additional Power Purchase Liability for past period (Rs Cr)

Particulars	Bill Amount	Rebate as per accounts	Net Amount	Carrying Cost on Provisions made in 2006-07 @ 11.5% p.a.	Carrying Cost from Payment/ Due date @ 11.5% p.a. till May 2009	Total
Revised Power Purchase for 2007-08 (A)	-15.68	3.63	-19.31	-3.64	-3.93	-26.88
Revised Power Purchase for 2008-09 (B)	133.03	0.50	132.53	-6.31	2.74	128.96
Amount allowed in June 2009 (C)			117.95			117.95
Amount Carried Forward including carrying cost (A+B-C)						-15.87

Table 10: Approved Additional Power Purchase Liability for past period (Rs Cr)

Particulars	Bill Amount	Rebate as per accounts	Net Amount	Carrying Cost on Provision made in 2006-07 @ 11.5% p.a.	Carrying Cost from Payment/ Due date @ 11.5% p.a. from June 2009 to March 2011	Total
Amount Carried Forward	-15.87		-15.87		-3.19	-19.07
Revised Power Purchase for FY 2009-10	43.62	0.17	43.45	-0.06	4.55	47.94
Revised Power Purchase for FY 2010-11	67.73		67.73		-0.19	67.55
Additional Power Purchase Cost on account of Carrying Cost allowed to PPCL and IPGCL	10.87		10.87			10.87
Total Amount Receivable	106.35	0.17	106.17	-0.06	1.17	107.28

DVB arrears**Petitioner's Submission**

- 3.17 The Petitioner has submitted that it filed an appeal before the Hon'ble ATE against the Tariff Order dated September 22, 2006 for Bulk Supply of Electricity for FY 2006-07 (Appeal No. 133/2007) and against MYT Order (Appeal No. 28/2008). The Petitioner requested the Hon'ble ATE to consider DVB arrears of Rs. 637 Cr on account of non receipt of the same from the Holding Company while determining the Bulk Supply Tariff for the Petitioner. The Hon'ble ATE vide Order dated 13.1.2009 in the Appeal No. 133 of 2007 has considered the issue and passed Order as under:

"... the appeal succeeds and the Commission shall not treat the amount received by DPCL as amount coming to the credit of appellant..."

The affect of the judgment along with the carrying cost will have to be given to truing up and subsequent tariff orders".

- 3.18 The Petitioner has submitted additional liability of Rs.637.66 Cr towards DVB arrears along with carrying cost @ 11.5% upto 31st March 2011 of Rs.408.79 Cr.

Commission's Analysis

- 3.19 The Commission has filed a statutory appeal under section 125 of Electricity Act 2003, assailing the Hon'ble ATE Order dated January 13, 2009 in Appeal No 133/07. The matter is sub-judice and has not attained finality.

Metering for NDMC & MES at “Sending end”**Petitioner’s Submission**

- 3.20 The Petitioner has submitted that the Hon’ble ATE in its Order dated January 13, 2009 in appeal No. 133/07 has allowed that the meter reading for NDMC & MES should be done at the sending end, consistent with such metering in the case of other distribution licensees. The relevant extract of the aforesaid judgement is as under :

“The other two issues are simple and the respondents did not dispute the appellant’s contention on it. The appellant submits that the meter reading for NDMC and MES should be done at the sending end consistent with such metering in the case of distribution licensee. The distribution companies make bulk purchases directly from the generating companies or GENCOs. The appellant provided wheeling facilities. Therefore it should be entitled to wheeling charges at the point of sending rather than at the point at which the wheeled electricity was received. We are of the opinion that the appellant’s claim in this respect is valid and reasonable.”

- 3.21 The additional liability on account of metering at sending end along with carrying cost @11.50% p.a. upto 31st March 2011 is Rs.20.21 Cr.

Commission’s Analysis

- 3.22 During the technical validation session, the Petitioner informed the Commission that as per the Order of the ATE in Appeal No 133/07, metering for NDMC shall be done at sending end, the Petitioner had raised bill to NDMC amounting to Rs. 17.21 Cr (which included Rs 11.79 Cr on account of additional wheeling charges and Rs 5.42 Cr as carrying cost). However, NDMC has disputed the same and has not released the payment in lieu of the same. The said amount has also been shown as revenue of DTL in its books of account in FY 2008-09.
- 3.23 The Commission is of the view that while the amount on account of additional wheeling charges are payable to the Petitioner by NDMC, the same cannot be shown as an expense in the ARR of the Petitioner since it is, in fact, an income from the prior period due to the Petitioner. The power purchase cost corresponding to the energy supplied to NDMC (and other distribution licensees) has already been trued up till FY2006-07 in previous Orders of the Commission.
- 3.24 The Commission has thus considered the amount (Rs 17.21 Cr) for which the bill was raised on NDMC following the Order of the Hon’ble ATE as revenue accruing to the Petitioner.
- 3.25 Any surcharge payable by NDMC for non payment of dues to the Petitioner after the bill was raised on it is subject to the commercial arrangement between the two parties and shall not be considered in the ARR.

- 3.26 The Commission directs the DTL to ensure metering at sending end on all feeders of Distribution Licensees.

Interest Expenditure on Short Term Loans

Petitioner's Submission

- 3.27 The Petitioner has claimed that the Commission had wrongly disallowed an amount of Rs. 2.28 Cr, taken by Petitioner as short term loan from DPCL in FY 2005-06 for the purpose of calculation of interest. The Hon'ble ATE in its Order in Appeal No 133/2007 has decided that:

"Since the amount has already been paid and there is no allegation of imprudence for the borrowing done by the appellant (DTL) from the Holding Company, there is no reason why the appellant should not be allowed to recover this amount through tariff and opined that appellant (DTL) should be allowed to recover this amount as pass through in tariff."

- 3.28 The Commission had also disallowed an amount of Rs 3.46 Crore, taken by the Petitioner as short term loan from DPCL in FY 2006-07. The Hon'ble ATE in the Order in Appeal no. 28/2008 has allowed the same and has stated that:

"The interest on expenditure on short-term borrowings being a necessary expenditure needs to be serviced. It is established by the Appellant that the Appellant took the short-term borrowings to meet the shortfall in the revenue requirements. Such short-term borrowings were only on account of legitimate revenue requirements. The principle regarding the same has already been laid down by the Tribunal in its judgment dated 13.01.2009 in Appeal No. 133/07. Therefore, the Appellant is entitled to interest on expenditure on short-term borrowings. However, it has to be ensured by the Commission that while allowing the carrying cost as directed by this Tribunal the interest on short-term borrowing is appropriately accounted for to avoid double payment of interest on account of short-fall in revenue requirement."

- 3.29 Thus the Petitioner has submitted that additional liability of Rs. 5.74 Cr on account of wrong disallowance of interest on short term loan for FY 2005-06 and FY 2006-07 should be allowed to it. Further, the carrying cost on the same @11.50% p.a. upto March 31, 2011 works out to be Rs 2.90 Cr.

Commission's Analysis

- 3.30 The Commission has allowed the interest on short term loan amounting to Rs 2.28 Cr for FY 2005-06 and Rs 3.46 Cr for FY 2006-07 as per the Order of the Hon'ble ATE dated January 13, 2009 in appeal no. 133/2007. Further, carrying cost on the same @ 11.50% p.a. up to March 2011 has also been allowed as shown in Table 12.

True up of Power Purchase Cost for the FY 2005-06 & RLDC/ULDC Charges for the FY 2002-07

Petitioner's Submission

- 3.31 The Hon'ble ATE in its Order dated August 13, 2009 in Appeal No. 250/2009 and in Appeal no. 28/2008 directed the Commission and Petitioner to resolve the issues where, the arithmetical computation was incorrectly done. Subsequently, the Commission had allowed the power purchase cost of Rs. 114.10 Cr for the FY 2005-06 and RLDC/ULDC Charges of Rs. 3.952 Cr for FY 2002-07. But the Commission had not considered the carrying cost on the same. The Hon'ble ATE in its Judgment in Appeal No. 28/2008 has directed that the carrying cost on the same should be allowed stating as under:-

"The State Commission allowed power purchase cost for the FY 2005-06 and RLDC/ULDC charges for the FY 2006-07 and the said charges were allowed by the State Commission, the carrying cost which is a consequential order has got to be allowed. Therefore, the State Commission is directed to pass the consequential order on the basis of the details of the material furnished by the Appellant relating to date of payment and the details of loan, etc."

- 3.32 Based on the Commission's Order dated November 12, 2009, the Petitioner raised the bill on distribution licensees with due date December 12, 2009 but only NDMC & MES have made the payment so far. The liability towards power purchase cost for FY 2005-06 and RLDC/ULDC charges for FY 2002-07 works out to be Rs.110.78 Cr (balance left after excluding the payment received from NDMC & MES). Further the Petitioner has requested that the carrying cost @ 11.5% p.a. upto March 31, 2011 of Rs.66.31 Cr may also be considered.

Commission's Analysis

- 3.33 In the matter of power purchase cost for FY 2005-06 and RLDC/ULDC charges for FY 2002-07, the Commission has already passed an Order dated November 12, 2009 and has allowed the power purchase cost of Rs. 114.10 Cr for the FY 2005-06 and RLDC/ULDC Charges of Rs. 3.952 Cr for FY 2002-07.
- 3.34 The Petitioner has informed the Commission that the said liability has not yet been paid by the distribution licensees, in spite of directions of the Commission and has thus claimed carrying cost on the amount up till March 2011. The Commission is of the view that the Petitioner is eligible for claiming carrying cost on this amount in its ARR only up till November 2009 since after this the Petitioner has raised bills to distribution licensees. The Petitioner should claim surcharge/carrying cost post November 2009 from the distribution licensees for non payment of dues in accordance with the commercial arrangement between them. The Commission has allowed carrying cost till November 2009, which comes to Rs 56.11 Cr.

- 3.35 The said amount was not included in the ARR approved for the distribution licensees for FY 2009-10, as the Tariff Order for FY 2009-10 was issued in May 2009, about six months prior to the Order of the Commission (November 12, 2009) granting additional power purchase and RLDC/ULDC charges to the Petitioner. Accordingly, the Commission has allowed the distribution licensees to recover this amount in their ARR for FY 2011-12, along with the appropriate carrying cost.
- 3.36 The Commission is of the view that in case the LPSC claimed by the Petitioner from the distribution licensees for the period December 2009 - March 2011 is higher than the carrying cost allowed to the distribution licensees for the same period, the latter must bear the difference and it shall not be allowed in the ARR of the distribution licensees. The Commission considers this to be appropriate as the difference between the two amounts is in the nature of penal interest which must be borne by the distribution licensees themselves and should not be passed on to the consumers.
- 3.37 The Commission is of the view that the Petitioner is entitled for carrying cost on Rs 56.11 Cr for the period between December 2009 and March 2011 as the Commission in allowing this carrying cost of 56.11 Cr in ARR for FY 2011-12 instead of allowing it in November 2009, the Commission has allowed Rs 56.11 Cr in this Order.

Table 11: Power Purchase Cost for FY 2005-06 and RLDC/ULDC Charges for 2002-07 (Rs Cr)

Particulars	Amount	Months	Carrying Cost @ 11.5%
Power Purchase Cost for FY2005-06	114.10	50	54.67
RLDC/ULDC Charges for FY2002-07	3.95	38	1.44
Carrying Cost on Carrying Cost	56.11	16	8.60
Total			64.72

Surplus Approved for FY 2006-07

Commission's Analysis

- 3.38 In the MYT Order for the Petitioner, the Commission had carried out true-up for FY 2006-07 and had approved a total surplus of Rs 196.17 Cr. The same was to be adjusted towards the ARR of the distribution licensees. The Petitioner has submitted that no payment has been made so far to the distribution licensees on this account.
- 3.39 The Commission has, therefore, adjusted the surplus amount (Rs 196.17 Cr along with negative carrying cost@11.5%) against the amount receivable by the Petitioner due to revision of costs pertaining to the Policy Direction Period as discussed in the previous sections. The same is shown in Table 12.

Net Impact of ATE Orders and Other Liability for Policy Direction Period (2002-07)

3.40 The net impact of the ATE Orders in Appeal No. 133/07 & 28/08 and Additional Power Purchase Liability of the prior period has been summarised below.

Table 12: Net impact of ATE's Judgment in Appeal No. 133/07 & 28/08 and Additional Power Purchase Liability as approved by the Commission (Rs Cr)

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Gap	-	2.41	(201.10)	(224.23)	(250.02)	(278.77)
Additions During the Year	2.28	(192.71)	-	-	-	-
<i>Interest on Short Term loan</i>	2.28	3.46	-	-	-	-
<i>Surplus Approved for FY 2006-07</i>	-	(196.17)	-	-	-	-
Rate of Interest (%)	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%
Carrying Cost	0.13	(10.80)	(23.13)	(25.79)	(28.75)	(32.06)
Closing Gap	2.41	(201.10)	(224.23)	(250.02)	(278.77)	(310.83)
Additional Power Purchase Cost (2002-07)						107.28
Metering at Sending End						(17.21)
Carrying cost on Power Purchase Cost for FY2005-06 & RLDC/ULDC Charges						64.72
Total						(156.04)

Impact of ATE Orders for the FY 2007-08 to FY 2010-11**Correction of inflation-linked escalation factor for Employee Cost and A&G Expenses****Petitioner's Submission**

- 3.41 The Petitioner has submitted that in accordance with the MYT regulations, employee cost and A&G expenses is linked to an inflation-based escalation factor that takes into account the inflation indices of the immediate past five years. While fixing the tariff for FY 2007-08, the Commission had taken inflation figures for FY 2001-02 to FY 2005-06 because the figures for FY 2006-07 were not available then. However, the latest figures of CPI & WPI are now available; the Commission should replace the provisional computation for FY 2007-08 to FY 2010-11 with confirmed figures by correcting the escalation factor.
- 3.42 The table below gives the revised calculations as submitted by Petitioner and the amount that the Commission has been requested to now include in the ARR.

Table 13: Proposed amount due to correction of inflation-linked index

Particulars	Units	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Allowed in the MYT Order					
Escalation factor (%)	%	4.15%	4.15%	4.15%	4.15%

Particulars	Units	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee expenses	Rs. Cr.	56.19	64.37	67.04	69.83
A&G expenses	Rs. Cr.	14.89	15.51	16.15	16.82
Revised expenses proposed by Petitioner (as per the corrected inflation factor)					
Escalation factor	%	5.29%	8.72%	7.52%	7.36%
Employee expenses	Rs. Cr.	56.80	61.76	66.40	91.26
A&G expenses	Rs. Cr.	15.06	16.37	17.60	24.25
Amount requested to be trued up					
Establishment expenses	Rs. Cr.	0.62	-2.61	-0.64	21.43
A&G expenses	Rs. Cr.	0.16	0.86	1.46	7.43
Total	Rs. Cr.	0.78	-1.75	0.82	28.86

Commission's Analysis

- 3.43 As per the MYT Regulations for determination of transmission tariff, employee and A&G 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:

$$(a) O\&M_n = (R\&M_n + EMP_n + A\&G_n) * (1 - X_n)$$

$$(i) \text{ Where, } R\&M_n = K * GFA_{n-1}$$

$$(ii) EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX_n / INDX_{n-1}), \text{ and}$$

$$(iii) INDX_n = 0.55 * CPI_n + 0.45 * WPI_n$$

Where

(b) 'K' is a constant (could be expressed in %) governing the relationship between O&M costs and Gross Fixed Assets (GFA) for the nth year. The value of K shall be specified in the MYT Order of the Commission;

(c) *INDX_n – Inflation Factor to be used for indexing can be taken as a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding five years*

... ”

- 3.44 The same formula for determination of O&M expenses has been specified for the distribution licensees in Delhi in the DERC (Determination of Wheeling and Retail Supply Tariff) Regulations, 2007 and similar methodology was used for determination of O&M expenses for both transmission and distribution licensees in

the MYT Orders of 2008. NDPL, in Appeal No 52/2008 against the MYT Order raised the issue of determination of escalation factor before the ATE. The same has been decided upon by the Hon'ble ATE in its Order dated 31st May, 2011. The summary of NDPL's claim as summarized in Order of the Hon'ble ATE is given below:

"... According to the Appellant, while computing the inflation factor for the MYT period starting from FY 2007-08, the Delhi Commission has erred on following two counts:

(i) The Commission has considered the inflation factors for Consumer Price Index and Whole-sale Price Index for the FY 2001-02 to FY 2005-06 instead of FY 2002-03 to FY 2006-07; and

(ii) Contrary to MYT Regulations, the Delhi Commission has erroneously applied the inflation factor for the entire Control Period based on the annual basis for the FY 2001-02 to FY 2005-06. Due to this wrong calculation, it has resulted in unjust denial of expenses in the ARR to the extent of several Cr of rupees for the FY 2007-08 to FY 2010-11. For the year in issue, i.e. FY 2007-08, the State Commission has wrongly calculated the immediately preceding 5 years from FY 2001-02 to FY 2005-06. The words "immediately preceding 5 years" appearing in 5.4(c) of the Regulations imply immediately preceding 5 years for which the final figures are available. This means immediately preceding 5 years would be FY 2002-03 to FY 2006-07."

3.45 The Hon'ble ATE has given the following judgement in this matter:

"22. While we agree with the contention of the Appellant that for determining the O&M expenses for the FY 2007-08, the indexation factor shall be based on CPI and WPI figures for the period 2002-03 to 2006-07, we are not convinced that the State Commission shall have determined the inflation factor for each year of the Control Period on rolling basis. At the time of deciding the MYT tariff, the inflation factor for the control years will not be available, therefore, indexation factor worked for the first year of the Control Period on the basis of preceding five years has to be used for all years during the Control Period as there is no provision for true up of O&M expenses in the Regulations and for determination of indexation factors on rolling basis.

However, the indexation factor based on actual WPI and CPI indices for the control years of the present MYT tariff will be used while deciding the indexation factor for the next MYT tariff and, therefore, no prejudice will be caused either to the distribution company or the consumers. We also observe that in the Central Commission's Regulations also the O&M expenses for generating station and transmission system are escalated at a fixed escalation factor during the Control Period.

23. Accordingly this issue is only partly decided in favour of the Appellant to the extent that the indexation factor has to be determined on the basis of actual WPI and

CPI for the immediately preceding five years period from FY 2002-03 to FY 2006-07 and not FY 2001-02 to FY 2005-06 as worked out by the State Commission. The State Commission is directed to accordingly allow the O&M Expenses for the Control Period after including CPI/WPI during FY 2006-07 along with the carrying cost."

- 3.46 Since the provisions regarding the O&M expenses in the MYT Regulations are same for transmission and distribution licensees and similar approach was followed for determination of O&M expenses for transmission and distribution licensees in the MYT Orders of 2008, the Commission has decided to revise the O&M expenses for the Petitioner in accordance with the Order of the Hon'ble ATE in Appeal No. 52/2008 of NDPL.
- 3.47 Accordingly, the Commission has re-determined the escalation factor for the Control Period on the basis of actual WPI and CPI for the immediately preceding five years period from FY 2002-03 to FY 2006-07 and not FY 2001-02 to FY 2005-06 as worked out in the MYT Order. The escalation factor, however, has not been revised on a rolling basis as directed by the Hon'ble ATE.
- 3.48 The CPI and WPI values for calculation of revised escalation factor are given in the table below.

Table 14: Actual CPI and WPI

Year	CPI (Overall)	% Growth YoY	WPI (Overall)	% Growth YoY
2000-01	444.17		155.59	
2001-02	463.33	4.31%	161.34	3.70%
2002-03	481.75	3.98%	166.85	3.42%
2003-04	500.33	3.86%	175.90	5.42%
2004-05	519.50	3.83%	187.23	6.44%
2005-06	542.41	4.41%	195.60	4.47%
2006-07	578.75*	6.70%	206.20	5.42%

Source: Ministry of Labour Website, <http://labourbureau.nic.in> and Ministry of Commerce and Industry Website, http://eaindustry.nic.in/Download_Data_9394.html

*Obtained using Average CPI as per new series (2001=100) i.e. 125 X linking factor between old and new series i.e. 4.63

- 3.49 Based on these values, the Commission has re-calculated the annual growth in values of CPI (overall) for Industrial Workers and WPI (overall) for the period FY 2002-03 to FY 2006-07 and has considered the same for determination of indices during the Control Period. The summary of the same is provided in the table below.

Table 15: Projected CPI and WPI during the Control Period

Year	Projected Growth in CPI	Projected Growth in CPI	CPI (Overall)	Projected Growth in WPI	Projected Growth in WPI	WPI (Overall)
	Approved in MYT Order	Approved Now	Approved in MYT Order	Approved Now	Approved Now	Approved Now

Year	Projected Growth in CPI	Projected Growth in CPI	CPI (Overall)	Projected Growth in WPI	Projected Growth in WPI	WPI (Overall)
2007-08	4.0%	4.55%	605.11	4.7%	5.03%	216.58
2008-09	4.0%	4.55%	632.67	4.7%	5.03%	227.48
2009-10	4.0%	4.55%	661.49	4.7%	5.03%	238.93
2010-11	4.0%	4.55%	691.62	4.7%	5.03%	250.96

- 3.50 The Commission has determined the inflation factor for the nth year (INDX_n) using a weighted average of CPI and WPI as specified in the MYT Regulations. The inflation factor is then used to calculate the escalation factor for each year (INDX_n/INDX_{n-1}) as shown in the table below.

Table 16: Escalation Factor for the Control Period

Year	Index (Consolidated)	Index (Consolidated)	Escalation Factor	Escalation Factor
	Approved in MYT Order	Approved Now	Approved in MYT Order	Approved Now
2006-07	407.08	411.10		
2007-08	423.97	430.27	1.0415	1.0466
2008-09	441.56	450.34	1.0415	1.0466
2009-10	459.88	471.34	1.0415	1.0466
2010-11	478.97	493.32	1.0415	1.0466

- 3.51 The table below gives the employee and A&G expenses approved in the MYT Order and approved now after revision of the escalation factor.

Table 17: Revised Employee and A&G Expenses (Rs Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
A&G Expenses approved in MYT Order	14.30	14.89	15.51	16.15	16.82
A&G Expenses Revised	14.30	14.96	15.66	16.39	17.15
Employee Cost (excluding impact of 6 th Pay Commission) Approved in MYT Order	53.95	56.19	58.52	60.95	63.48
Employee Cost (excluding impact of 6th Pay Commission) Revised	53.95	56.47	59.10	61.85	64.74

Impact of Recommendations of 6th Pay Commission

Petitioner's Submission

- 3.52 The Petitioner has submitted that the employee expenses approved for the years FY 2007-08 to FY 2010-11 have to be revised to take into account the actual increase in employee expenses on account of 6th Pay Commission. Since the 6th Pay Commission

recommendations have been implemented in the month of October 2009 and w.e.f. January 1 2006, the Petitioner in its petition has divided the arrears into two groups:

- (a) Arrears from Jan 2006 and upto March 2009 – Rs 30.68 Cr
- (b) Arrear paid for FY 2009-10 (from April 2009 to September 2009) for the purpose of calculating the impact of increase in salary due to the 6th pay commission. – Rs 8.8 Cr

3.53 In the subsequent submissions to the Commission, the Petitioner submitted that while it had considered the arrears paid out on account of 6th Pay Commission in FY 2009-10 in the tariff petition, it had not considered the overall impact of the 6th Pay Commission – on salary, allowances, employers contribution to PF, Pension Contribution and Leave Salary Contribution in the tariff petition. The revised year wise break-up impact of the total impact of 6th Pay Commission on employee cost as submitted by the Petitioner in the additional information is shown below.

Table 18: Impact of Wage Revision as submitted by the Petitioner (Rs Cr)

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Total Additional Amount Submitted on account of Wage Revision	3.71	15.71	16.14	21.34	27.74	34.34

Commission's Analysis

3.54 The Commission in its MYT Order had anticipated additional expenditure on account of wage revision due to implementation of recommendations of the 6th Pay Commission.

3.55 While approving employee cost for the Control Period it had allowed additional cost for FY 2005-06 and FY 2006-07 and had stated:

“4.26 The Commission has recognised the uncontrollable nature of the 6th Pay Commission recommendations in determination of employee expenses during the Control Period. Since the revision in pay, if any, may be applicable from January 1, 2006, the Commission has considered an increase of 10% in total employee expenses for the values in FY06 (3 months) and FY07 due to the same.

4.27 Based on this, the Commission has calculated the revised employee costs for FY06 and FY07 and the arrears arising out of it...”

3.56 The actual impact of wage revision on employee cost of FY 2005-06 and FY 2006-07 has now been submitted as Rs 3.71 Cr and Rs 15.71 Cr. Accordingly, the revised employee cost for the two years is shown below:

Table 19: Revised Employee Expenses for FY 2005-06 and FY 2006-07 (Rs Cr)

Particulars	FY 2005-06	FY 2006-07
Net Trued Up Employee Cost Approved in MYT Order (excluding impact of wage revision)	48.31	53.95
Additional amount approved now on account of wage revision	3.71	15.71
Revised Employee Cost	52.02	69.66

3.57 For considering the impact of wage revision on employee cost for each year from FY 2007-08 to FY 2010-11 the Commission, in its MYT Order, had increased the net trued up employee cost of the base year (i.e. Rs 53.95 Cr for FY 2006-07) by 10%, and had escalated the increased base employee expenses by the annual escalation factor to arrive at the approved employee cost for each year from FY 2007-08 to FY 2010-11. The base employee expenses had been increased by 10% since the actual impact of wage revision on the base expenses was not available at the time. However, since the actual impact of wage revision on employee cost for FY 2006-07 is now available, the employee expenses of the base year have been revised as shown in

3.58 Table 19 above. The revised employee expenses have been escalated by the relevant escalation factor to arrive at the employee expenses for each year from FY 2007-08 to FY 2010-11 as would have been done at the time of deciding the MYT tariff if the revised employee expense for FY 2006-07 had been known. The revised trajectory for employee expenses for FY 2007-08 to FY 2010-11 after revision in the base is shown below:

Table 20: Impact of Wage Revision on Employee Cost approved by the Commission (Rs Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Base Employee Cost for FY 2006-07 (Refer Table 19)	69.66				
Escalation Factor		1.0466	1.0466	1.0466	1.0466
Employee Cost (Including 6th Pay Commission impact) – Revised		72.91	76.31	79.87	83.59

3.59 Hence, the Commission has allowed additional amount on account of revision of base year (FY 2006-07) employee cost for FY 2007-08 to FY 2010-11, as shown in the table below:

Table 21: Additional Amount approved on account of revision of Base Employee Cost (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee Cost (excluding 6th Pay Commission impact) - Revised (A) (Refer Table 17)	56.47	59.10	61.85	64.74
Employee Cost (Including 6th Pay Commission impact) – Revised (B)	72.91	76.31	79.87	83.59
Extra Employee Cost Allowed due to Revision of Base Year Expenses (B-A)	16.44	17.21	18.02	18.85

- 3.60 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 and Children Education Allowance with effect from FY 2008-09. The total amount on account of these new allowances is shown below.

Table 22: Additional Amount allowed for 'New Allowances' (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Amount allowed due to New Allowances	0	4.99	8.87	12.36

- 3.61 The Commission has added the amount paid on account of these 'New Allowances' separately in the employee cost from FY 2008-09 onwards. The total impact of wage revision, including amount allowed on account of 'New Allowances' is shown in the table below.

Table 23: Additional Amount allowed on Wage Revision (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Extra Employee Cost Allowed due to Revision of Base Year Expenses (A)	16.44	17.21	18.02	18.85
Amount allowed due to New Allowances (B)	0	4.99	8.87	12.36
Total (A+B)	16.44	22.20	26.89	31.21

- 3.62 The Commission while approving the employee cost in the MYT Order had expected the arrears on account of revision of employee costs to be paid in FY 2008-09 and had considered the payment of arrears in the total employee cost approved for FY 2008-09. Similarly, the increase in salaries had been considered for each year, but the impact of such increase had only been taken from FY 2008-09 onwards. Regarding the actual payment of arrears for the revision in salaries from FY 2007-08 to FY 2009-10, the Petitioner has submitted that:

- Arrears amounting to Rs 5.06 Cr were paid in FY 2008-09.
- Arrears amounting to Rs 4.88 Cr have not yet been paid and are in the process of payment.
- The amount pertaining to Over Time /Holiday Pay arrears (Rs 8.01 Cr for FY 2007-08 to FY 2009-10) has been paid in the FY 2010-11.
- The amount due to the Pension Trust (on account of revision in Leave Salary Contribution (LSC) and Pension Contribution (PC)) is provisional and is yet to be released to the Pension Trust.
- The balance arrears on account of revision in salaries from January 1, 2006 have been paid in FY 2009-10.

- 3.63 Accordingly, while the Commission has considered the increase in salaries for each year, the payment of arrears has been considered partly in FY 2008-09 (Rs 5.06 Cr), partly in FY 2010-11 (Rs 8.01 Cr) and partly in FY 2011-12 (Rs 4.88 Cr). The payment to Pension Trust on account of revised LSC and PC payments (Rs 17.62 Cr) has been considered provisionally in FY 2011-12. The balance amount on account of wage revision has been considered in FY 2009-10. Further, the impact of increase in salaries has only been taken from FY 2010-11 onwards.

Table 24: Approved Arrears and Increase in Employee Cost (Rs Cr)

Particulars	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Extra Employee Cost Allowed due to Wage Revision (Refer Table 19)	3.71	15.71					
Extra Employee Cost Allowed due to Revision of Base Year Expenses (Refer Table 21)			16.44	17.21	18.02	18.85	
Amount allowed due to New Allowances (Refer Table 22)	0	0	0	4.99	8.87	12.36	
Total	3.71	15.71	16.44	22.20	26.89	31.21	
Accumulated Arrears Pay Out				5.06	49.38	8.01	22.50*
Approved Increase in Salaries						31.21	

*Has been included in ARR of FY 2011-12

Table 25: Revised Employee Expenses for FY 2007-08 to FY 2010-11 (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Employee Cost Allowed - MYT Order (A)	56.19	76.59	67.05	69.83
Employee Cost (excluding 6th Pay Commission) – Revised (B)	56.47	59.10	61.85	64.74
Arrears (C)		5.06	49.38	8.01
Increase in Salaries in FY 2010-11 (D)				31.21
Employee Cost Revised (E=B+C+D)	56.47	64.16	111.23	103.96
Difference from MYT Order (E-A)	0.28	-12.44	44.19	34.13

Additional Repair and Maintenance (R&M) Expenses on account of GIS

Petitioner's Submission

- 3.64 The Petitioner has submitted an amount of Rs.15.33 Cr as additional R&M expenditure in FY 2010-11 for overhauling of GIS S/Stn at Kashmere Gate and Park Street.
- 3.65 During the technical validation sessions, the Commission directed the Petitioner to provide detailed break-up of the R&M expenditure. The Petitioner has submitted that

9 bays of 220kV GIS of ABB, Switzerland make at Park street and 7 bays at Kashmere gate were commissioned in the year 1994 & 1997 respectively. As per OEM recommendation the routine diagnosis of complete GIS Bays is to be carried out after 5 years & Pilot overhaul of selected GIS compartment after 10-15 years. The maintenance expenses are incurred on the basis of the diagnosis suggested by OEM. Diagnoses of these GIS bays were carried out by availing the services of OEM i.e ABB, Switzerland in the month of May & June, 2007. On the basis of the diagnosis report they have recommended for complete overhauling of both the GIS boards at Park Street and Kashmere Gate including procurement of strategic spares required for overhauling works as well as spares for future use. As per their recommendation, overhauling of these GIS boards are required to be carried out on priority because already more than 10 years had been completed after commissioning of these GIS boards. The following expenditure was incurred on the overhauling of GIS bays at Park Street and overhauling of GIS bays at Kashmere Gate.

<i>Supply of the material for overhauling work</i>	<i>Rs 10,00,74,063.15</i>
<i>Supervision services for overhauling work at Park Street:</i>	<i>Rs 12760233.00</i>
<i>Supervision services for overhauling work at Kashmere Gate:</i>	<i>Rs 11275301.00</i>
<i>Custom Duties and other taxes:</i>	<i>Rs 28678019.00</i>
<i>Total Cost:</i>	<i>Rs 152787616.00</i>

Commission's Analysis

- 3.66 With regards to the A&G and other expenditure approved by the Commission in MYT Order, the ATE in its Judgement in Appeal No 28/2008 has stated as below:

"The next issue relates to Administrative & General expenditure, etc. According to the Appellant, the State Commission has wrongly not considered the projections made by the Appellant. It is replied by the Learned Counsel for the State Commission that the State Commission has determined the A&G expenses as per Regulations 5.7 of the DERC Regulations and the Appellant actually gave bald proposal of 4 to 5% increase whereas the State Commission has calculated the increase based on the provisions contained in the MYT Regulations and that therefore, the finding is correct. The Appellant had claimed additional expenses to meet the expenditure on gas insulated switch gear station of the Appellant in Delhi for which costs have increased substantially. Therefore, the State Commission in the truing-up process may consider the actual expenditure incurred by the Appellant pertaining to norms laid down in the Regulations and deviations and relaxations, if any required based on the justification provided by the Appellant."

- 3.67 Thus, as per the Order of the ATE, the Commission has to consider additional A&G and other expenditure pertaining to gas insulated switchgear (GIS) submitted by the Petitioner and allow the same based on the justification provided by the Petitioner.
- 3.68 The Commission has observed that the GIS equipment installed at Park Street and Kashmere Gate stations of the Petitioner is 17 years and 14 years old respectively.

There had been no overhaul of the equipment since it was installed, more than 10 years ago and hence overhauling had to be done on priority basis through the OEM.

- 3.69 The Commission had allowed R&M expenses for the MYT Control Period using the following formula:

$$R\&Mn = 2.19\% * GFA_{n-1}$$

- 3.70 Since the capital cost of the GIS equipment is included in the GFA considered for calculating the R&M expenses, ideally, the additional expenditure should not have been allowed to the Petitioner now. However, it was also noted that the ratio 2.19% (or the K factor) was determined by the Commission on the basis of the average K factor observed for the Petitioner during FY 2002-03 to FY 2006-07, the period during which no overhauling was carried out for the above two GIS sub-stations.
- 3.71 Considering the extraordinary nature of the expenditure and that no further overhauling is expected to be carried out during the next 10 years, the Commission has allowed the additional R&M expenses. At the same time, to avoid additional burden on the consumer in a single year, the expenditure has been amortised over five years from FY 2010-11 to FY 2014-15, along with the appropriate carrying cost @ 11.5% per annum.

Table 26: Additional R&M expenses allowed on account of GIS (Rs Cr)

Particulars	Total	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15
Opening Balance	15.27	15.27	12.84	10.13	7.12	3.75
Additional R&M Allowed during the year (Repayment)		3.957	3.957	3.957	3.957	3.957
Average Balance		13.29	10.86	8.16	5.14	1.77
Interest during the year		1.53	1.25	0.94	0.59	0.20
Closing Balance		12.84	10.13	7.12	3.75	0.00

Additional Administrative and General (A&G) Expenses on account of GIS

Petitioner's Submission

- 3.72 The Petitioner has submitted additional A&G expenses of Rs 4.99 Cr in FY 2009-10 on “specialised training of Gas Insulated Switchgears(GIS) & increase in allowances due to sixth pay commission”
- 3.73 The Petitioner was requested to submit, in the additional information, justification for incurring such a large expenditure on GIS training. In response the Petitioner submitted that:

“During the year the licensee has finalized various contracts for the erection of GIS Substation and laying of XLPE cable while inviting international competitive bids. Since both GIS & XLPE cable are based on latest technology which has not been so far significantly tapped in India, there was imminent need for imparting special

training by the foreign manufacturers who bagged the said contracts. Therefore, the extra ordinary expenses on the foreign travelling for special training and tender invitation amounting to Rs.4.99 Cr after the adjustment of other items not considered in ARR has been claimed in addition to expenses of A&G based on specified formula in the tariff regulation."

- 3.74 Citing the above response as inadequate the Commission requested the Petitioner to submit further detail regarding the expenditure incurred on training for operation of the GIS substation. The Petitioner submitted the following details vide letter dated 13th June, 2011:

"Details of Rs. 4.99 Cr as claimed in A&G expenditure are as under:-

1) Tender publication cost	Rs.4.47 Cr
2) Foreign travel cost for special technical training	Rs.1.18 Cr

Total **Rs. 5.65 Cr**

Less adjustment for foreign currency translation, asset written off etc. **Rs.0.66 Cr**

Net claimed towards extra ordinary expenses **Rs. 4.99 Cr"**

Commission's Analysis

- 3.75 With regards to the A&G and other expenditure approved by the Commission in MYT Order, the Hon'ble ATE in its Judgement dated September 29, 2010 in Appeal No 28/2008 has stated as below:

"The next issue relates to Administrative & General expenditure, etc. According to the Appellant, the State Commission has wrongly not considered the projections made by the Appellant. It is replied by the Learned Counsel for the State Commission that the State Commission has determined the A&G expenses as per Regulations 5.7 of the DERC Regulations and the Appellant actually gave bald proposal of 4 to 5% increase whereas the State Commission has calculated the increase based on the provisions contained in the MYT Regulations and that therefore, the finding is correct. The Appellant had claimed additional expenses to meet the expenditure on gas insulated switch gear station of the Appellant in Delhi for which costs have increased substantially. Therefore, the State Commission in the truing-up process may consider the actual expenditure incurred by the Appellant pertaining to norms laid down in the Regulations and deviations and relaxations, if any required based on the justification provided by the Appellant."

- 3.76 Thus, as per the Order of the ATE, the Commission has to consider additional A&G expenditure submitted by the Petitioner and allow relaxations/deviations in the same based on the justification provided by the Petitioner. Accordingly, the Commission

directed the Petitioner to submit details of the additional A&G expenditure of Rs 4.99 Cr for FY 2009-10 and provide justification for allowing the same.

- 3.77 The Commission observed that the Petitioner had included the entire tender cost incurred on AIS and GIS during FY 2009-10 while claiming the additional A&G expenses on account of GIS. The Petitioner had been issuing tenders in the past also, which were already covered under A&G Expenses. The Petitioner has, however, published tenders for International Competitive Bidding for GIS sub-stations,. Therefore, the Commission directed the Petitioner to submit tender cost specific to the GIS sub-stations.
- 3.78 The Petitioner informed the Commission that cost of tenders for GIS sub-stations were Rs. 1.93 Cr. Therefore, the Commission approves additional A&G Expenses of Rs 2.45 Cr towards GIS stations (Rs 1.93 Cr of tender cost, Rs 1.18 Cr of training cost less adjustment of Rs 0.66 Cr).

Efficiency Factor for O&M Expenditure

Petitioner's Submission

- 3.79 The Petitioner has not proposed any efficiency factor in the true-up petition or the petition for ARR for FY 2011-12. The Commission sought from the Petitioner its submission for a reasonable value of the efficiency for each year of the Control Period during the technical validation sessions and urged the Petitioner to place before the Commission information so that a reasonable value for the efficiency factor may be determined. In response to the Commission's queries the Petitioner submitted that:

"DTL has 24 number of conventional type S/stn upto March 2010 and most of them are 25-30 years old. DTL is in the process of upgradation of the same in a phased manner and requires at least ten year period for complete upgradation as well as automation of existing sub stations. Therefore, R&M expenses are required to maintain the substation and will reduce only after that.

As far as reduction in employee and A&G costs are concerned, when the complete EHV system will be automatic and restructuring of the organizational setup for the optimum utilization of employees as per ERP module implemented then only DTL will be able to reduce the O&M cost. Therefore, DTL requests the Commission not to consider the efficiency factor up to FY 2011-12."

Commission's Analysis

- 3.80 As per the MYT Regulations for determination of transmission tariff, employee and A&G 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 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.

- 3.81 In its MYT Order of 2008, in accordance with the MYT Regulations, the Commission had set the efficiency factor for each year of the Control Period and had noted:

"The Commission is of the view that O&M trajectory for the Control Period shall be decided considering an expected annual efficiency improvement factor.

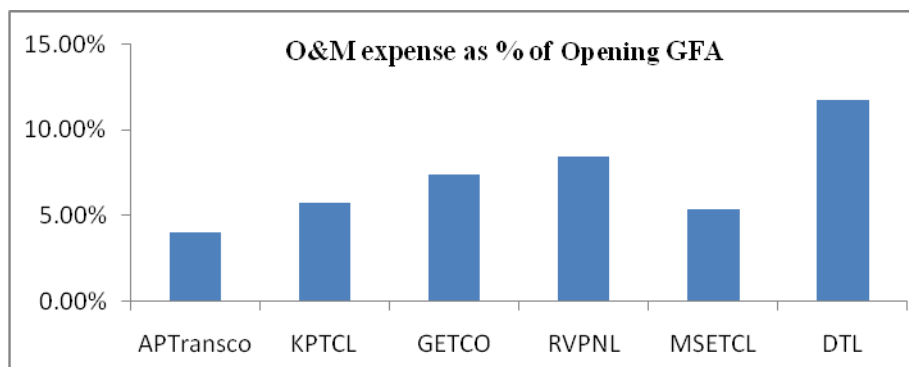
The Commission expects the Petitioner to improve its performance considering the significant investment made during the Control Period. Hence, the Commission has determined the efficiency improvement factor as 2%, 3% and 4% for FY09, FY10 and FY11 respectively."

- 3.82 The Petitioner in Appeal No 28/2008 against the said MYT Order had appealed against the application of the efficiency factor. The Hon'ble ATE, in its Order dated September 29, 2010 has ruled that:

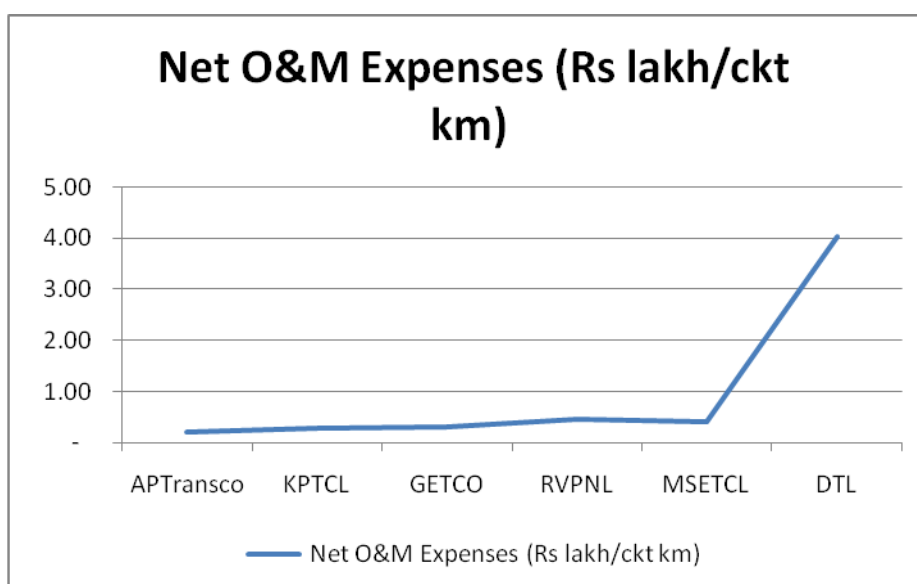
"(viii) The State Commission made an ad-hoc reduction of 2%, 3% and 4% for the FY 2008-09, FY 2009-10 and FY 2010-11 respectively. The only reason given by the State Commission is that the Appellant will have to improve its performance. There cannot be any reason for the ad-hoc reduction in O&M expenditure applying any annual improvement efficiency factor. Even though the Regulations provide for application of efficiency factor, such factor has to be determined only on the basis of the materials placed before the State Commission and analysis by the Commission and not on ad-hoc basis. The State Commission is directed to consider this and pass order accordingly on this issue."

- 3.83 Thus while the Hon'ble ATE has not ruled against the application of an efficiency factor, it has directed the Commission to re-look into the value determined for such a factor after further analysis and considering the submissions of the Petitioner. The Petitioner, in its true up petition for FY 2007-08 to FY 2010-11 has not proposed any value for the efficiency factor. It has also not proposed any efficiency factor for FY 2011-12. In spite of repeated queries by the Commission, the Petitioner has not put forth any submission for determination of the efficiency factor.

- 3.84 However, the Commission has benchmarked the O&M expenses of the Petitioner against O&M expenses of the transmission licensees in other States. The Commission has observed that the O&M expenses of the Petitioner are higher than those of other State Transmission utilities. The summary of the relative comparison of O&M expenses of DTL vis-a-vis the other Transmission utilities is shown below:

Figure 1: Comparison of O&M Expenses* (% Opening GFA) for FY 2007-08

* for RVPNL O&M expenses include a component of terminal benefit liabilities

Figure 2: Comparison of O&M Expenses*

*Comparison of O&M /ckt km is for FY 2007-08 *for RVPNL O&M expenses include a component of terminal benefit liabilities

- 3.85 The Commission is of the view that the Petitioner should have made and should make all out efforts to bring about efficiency into the system. The Commission has approved capital expenditure of more than Rs 3000 Cr during FY 2007-08 to FY 2011-12 for the Petitioner for system improvement and introduction of new technologies, which should have enhanced the efficiency of the system. The Commission has thus retained the efficiency factor as set in the MYT Order i.e. 2%, 3% and 4% for FY 2008-09, FY 2009-10 and FY 2010-11 respectively. Therefore, , the Commission has maintained the efficiency factor for FY 2011-12 at the level of FY 2010-11, i.e. 4%.

Determination of Aggregate Revenue Requirement for FY 2011-12

3.86 As per the MYT Regulations, the ARR for the Petitioner will include the following components:

- (a) Operations and Maintenance Expenses;
- (b) Return on Capital Employed;
- (c) Depreciation, including Advance Against Depreciation;
- (d) Tax Expenses;
- (e) Non-Tariff Income; and
- (f) Income from other businesses.

Operation and Maintenance Expenses

3.87 As per the MYT Regulations, employee and A&G expenses for the Control Period are to be determined using the following methodology:

$$EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX_n / INDX_{n-1})$$

3.88 The escalation factor for the n^{th} year ($INDX_n$) is to be determined using a combination of Consumer Price Index (CPI) and Wholesale Price Index (WPI) for the previous five years.

Escalation Factor for FY 2011-12

Petitioner's Submission

- 3.89 The Petitioner has requested for revision of escalation factor for the years FY 2007-08 to FY 2010-11 based on the actual value of CPI and WPI for the respective year. The escalation factor for FY 2010-11 has been calculated as 1.0736 by the Petitioner.
- 3.90 Further as the CPI & WPI figures are not available for FY 2011-12, the Petitioner has considered the escalation factor proposed for FY 2010-11 i.e. 1.0736 as escalation factor for FY 2011-12 as well.

Commission's Analysis

- 3.91 The Commission has revised the escalation factor for the Control Period from 1.0415 as approved in the MYT Order to 1.0466 as explained in paragraph 3.48. The same has been considered by the Commission for determination of employee and A&G expenses of the Petitioner for FY 2011-12.

Employee Expenses

Petitioner's Submission

- 3.92 Employee cost for FY 2011-12 has been computed by the Petitioner by considering the employee cost for FY 2010-11 as Rs. 91.26 Cr, escalated by the escalation factor i.e. 1.0736.

Table 27: Employee Expenses submitted by the petitioner for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Escalation Factor	1.0529	1.0872	1.0752	1.0736	1.0736
Employee Cost*	56.80	61.76	115.68	91.26	97.97

*including impact of Wage Revision and excluding Payment to Pension Trust

Commission's Analysis

- 3.93 The Commission has determined the employee expenses of the Petitioner for the Control Period using the methodology prescribed in the MYT Regulations. Hence, the employee cost for the n^{th} year of the Control Period (EMP_n) has been determined using the employee cost for the $(n-1)^{\text{th}}$ year (EMP_{n-1}) and the escalation factor as determined above.
- 3.94 For calculation of the employee cost for FY 2011-12 the Commission has considered the following:
- Revised employee cost for FY 2010-11 as calculated in Table 25: Revised Employee Expenses for FY 2007-08 to FY 2010-11 (Rs Cr)
 - Revised escalation factor of 1.0466 as determined above in Para 3.91.
- 3.95 The employee expenses approved by Commission for the Control Period are shown in the table below.

Table 28: Approved Employee Expenses for FY 2011-12 (Rs Cr)

Particulars	FY 2010-11	FY 2011-12
Escalation Factor		1.0466
Employee Cost*	95.95	100.42
Arrears of 6th Pay Commission	8.01	22.50
Total Employee Expense	103.96	122.93

*excluding arrear of Sixth pay Commission

Administrative and General Expenses

Petitioner's Submission

- 3.96 A&G Expenses for FY 2011-12 have been computed by the Petitioner by considering the A&G expenses for FY 2010-11, escalated by the escalation factor i.e. 1.0736. It

has submitted that the A&G expense for FY 2011-12 is Rs 26.04 Cr as shown in the table below.

Table 29: A&G Expenses submitted by the Petitioner for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Escalation Factor	1.0529	1.0872	1.0752	1.0736	1.0736
Additional Expenses on GIS	-	-	4.99	-	-
Total A&G Expenses	15.06	16.37	22.59	24.25	26.04

Commission's Analysis

3.97 For the calculation of the A&G expenses for FY 2011-12 the Commission has considered the following:

- (a) Revised A&G Expenses for the FY 2010-11 as computed in Table 17.
- (b) Revised escalation factor of 1.0466 as determined above in Para 3.91.

3.98 The A&G Expenses approved by Commission for the Control Period are shown in the table below:

Table 30: Approved Employee Expenses for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Escalation Factor	1.0466	1.0466	1.0466	1.0466	1.0466
A&G Expenses	14.96	15.66	16.39	17.15	17.95
Additional Expenses on GIS	-	-	2.45	-	-
Total A&G Expenses	14.96	15.66	18.84	17.15	17.95

Repairs and Maintenance Expenses

3.99 As per the MYT Regulations, the Repairs and Maintenance (R&M) Expenses of the Petitioner for the Control Period have to be determined based on the following formula:

$$R\&M_n = K * GFA_{n-1}$$

Where, 'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) for the nth year.

Petitioner's Submission

3.100 The Petitioner has submitted that R&M expenses for the Control Period i.e. FY 2007-08 to FY 2011-12 has been calculated using the value of 'K' as 2.19% as approved by the Commission in the MYT Order and the actual value of opening GFA for the year. Accordingly, it has calculated the R&M expense for FY 2011-12 at Rs 57.07 Cr as shown in the table below.

Table 31: R&M Expenses submitted by the Petitioner for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
K Factor	2.19%	2.19%	2.19%	2.19%	2.19%
Opening GFA	922.98	990.18	1135.62	1220.75	2606.09
R&M Expenses	20.21	21.68	24.87	26.73	57.07
Additional Expenses on GIS				15.33	
Total Expenses	20.21	21.69	24.89	42.06	57.07

Commission's Analysis

- 3.101 The Commission has calculated R&M expenses for FY 2011-12 based on the 'K factor' of 2.19% and opening GFA of Rs 3197.98 Cr, or the closing GFA of FY 2010-11 as approved by the Commission in the MYT Order.
- 3.102 The Commission has also allowed additional expenditure for GIS stations as shown in Table 26.
- 3.103 The R&M Expenses approved by Commission for the Control Period are shown in the table below.

Table 32: Approved R&M Expenses for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved Now	Approved Now
K Factor	2.19%	2.19%	2.19%	2.19%	2.19%
Opening GFA	922.98	1112.98	1297.98	2497.98	3197.98
R&M Expenses	20.18	24.34	28.38	54.63	69.93
Additional Expenses on GIS				3.957	3.957
Total Expenses	20.18	24.34	28.38	58.58	73.89

Efficiency Factor

- 3.104 The issues regarding the efficiency factor have already been addressed by the Commission in paragraphs 3.80 onwards. The Commission has accordingly applied the efficiency factor of 4% to determine O&M expenditure for FY 2011-12.
- 3.105 The summary of total O&M Expenses approved by the Commission for the Control Period is provided in the table below.

Table 33: Approved O&M Expenses for the Control Period (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Employee Cost	56.47	64.16	111.23	103.96	122.93
R&M Expenses	20.18	24.34	28.38	54.63	69.93
A&G Expenses	14.96	15.66	16.39	17.15	17.95
Total O&M Expenses	91.61	104.16	156.01	175.74	210.82

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Efficiency Improvement		2%	3%	4%	4%
Net O&M Expenses	91.61	102.07	151.33	168.71	202.38
Additional R&M Allowed for GIS				3.96	3.96
Additional A&G Allowed for GIS			2.45		
Allowed O&M Expenses	91.61	102.07	153.78	172.67	206.34

Payment to Pension Trust

Petitioner's Submission

- 3.106 The Petitioner has also requested for approval of an additional amount of Rs 26 Cr and Rs 50 Cr on account of the expected payout to the Pension Trust in FY 2010-11 and FY 2011-12. This was later revised to Rs 23.84 Cr for FY 2010-11 and Rs 24.28 Cr for FY 2011-12 in the additional information submitted by the Petitioner.

Commission's Analysis

- 3.107 The Commission has considered the submissions made by Secretary, Pension Trust and CEO's of the DISCOMs at length. The Commission also examined the relevant provisions of the Transfer Scheme Rules, 2001, Tripartite Agreement entered amidst GoNCTD, DVB and association of Union of the officers and employees of the erstwhile DVB, Trust Deed, Pension Trust and the record pertaining to the Civil Writ Petition (C) No 1698/2010 filed by Delhi State Electricity Workers Union before the Hon'ble High Court of Delhi.
- 3.108 The Commission noticed that shortfall of the fund in the Pension Trust is the main issue in the said Writ Petition. At the present matter is sub-judice. The Commission also observes that Pension Trust is facing acute shortage of fund and is left with the meagre fund just sufficient to meet its obligation towards the pensioners for another 5 to 6 months only.
- 3.109 In view of the above and to avoid any undue hardship to the retired employees (pensioners) of the erstwhile DVB, the Commission has considered providing a provisional lump sum amount of Rs 150 Cr in the ARR of the DTL for FY 2011-12 subject to the final outcome in the Civil Writ Petition (C) No 1698/2010.
- 3.110 The Commission further directs DTL to transfer this amount of Rs 150 Cr to the Pension Trust and also maintain a separate record of payment made to Pension Trust.

Capital Investment and Capitalisation

Petitioner's Submission

- 3.111 In its tariff petition the Petitioner submitted the actual capitalisation during FY 2007-08 to FY 2009-10 and estimates for FY 2010-11. Further, it also submitted the details of the assets to be capitalised during the FY 2011-12 as per the Business Plan. The

year wise detail of assets capitalized for FY 2007-08 to FY 2010-11 as submitted by the Petitioner is given in Table 34 below.

- 3.112 The Petitioner in subsequent submissions to the Commission has submitted the revised estimates for capitalisation during FY 2010-11 at Rs 803.94 Cr, against Rs 1384.12 Cr as submitted in the petition. Further, the Petitioner, in the additional information submitted to the Commission, has projected capital investment and capitalisation of Rs. 1719 Cr and Rs 838.51 Cr respectively for FY 2011-12.

Table 34: Capitalisation (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Capitalisation of Investment	67.24	146.53	85.23	803.94	838.51

Commission's Analysis

- 3.113 The Commission has extended the Control Period and MYT Regulations for a period of one year upto March 31, 2012. Therefore, the capitalisation for the entire period from FY 2007-08 to FY 2011-12 shall be trued up on the basis of actual capitalisation carried out by the Petitioner at the end of the extended Control Period.
- 3.114 The capitalisation/capital investment plan of Rs 1719 Cr submitted by the Petitioner in the additional information for FY 2011-12 consisted of :
- Schemes which were approved by the Commission and were included in the Business Plan approved in the MYT Order and would be capitalized during FY 2011-12.
 - Schemes which were approved by the Commission, but were not included in the Business Plan approved in the MYT Order.
 - Schemes, for FY 2011-12, for which the Petitioner is seeking in principle approval of the Commission.
- 3.115 The capitalisation on account of schemes approved by the Commission in the MYT Order have already been considered during the Control Period of FY 2007-08 to FY 2010-11 and hence not considered for capitalisation for FY 2011-12.
- 3.116 The total capitalisation on account of schemes under 3.114 (b) and (c), as mentioned above, was projected at Rs 767.33 Cr by the Petitioner. However, on scrutiny the Commission observed this projected capitalisation also included capitalisation on account of schemes worth Rs 25 Cr already approved in the Business Plan approved in the MYT Order and also included miscellaneous O&M capital works of Rs 18 Cr. The Commission has deducted the same from the projected capitalisation and has accordingly approved additional capitalisation/capital investment of Rs 723.33 Cr for FY 2011-12.

Table 35: Approved Capitalisation for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved Now
Capitalisation of Investment	190.00	185.00	1200.00	700.00	723.33

Depreciation

Petitioner's Submission

- 3.117 The Petitioner has submitted revised computation of depreciation for FY 2007-08 to FY 2010-11. Further, it has submitted calculation for depreciation for FY 2011-12 considering the rates of depreciation as specified in the MYT regulations and the projected assets capitalised during FY 2011-12.
- 3.118 The depreciation incurred by the Petitioner during FY 2007-08 to FY 2010-11, the approved depreciation as per the MYT Order and the projected depreciation for FY 2011-12 as submitted by the Petitioner is given below:

Table 36: Depreciation as Submitted by the Petitioner (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Depreciation	33.99	37.44	41.11	66.92	109.46

Commission's Analysis

- 3.119 The Commission had earlier approved depreciation expenses in the MYT Order considering the approved GFA and capitalisation for FY 2007-08 to FY 2010-11 and the rates specified in the MYT Regulations.
- 3.120 Regulation 4.7(b) of MYT Regulations specifies that true up for Depreciation and RoCE shall only be done at the end of the extended Control Period. Since the Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012, the true up shall only be carried out at the end of the extended Control Period.
- 3.121 The Commission has calculated depreciation for FY 2011-12 considering the opening balance of GFA for the year (or closing balance of FY 2010-11) approved in the MYT Order, and the approved additional capitalisation during FY 2011-12 and the rates specified in the MYT Regulations.

Table 37: Depreciation Approved by the Commission for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT	Approved in MYT	Approved in MYT	Approved in MYT	Approved Now

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Order	Order	Order	Order	
Depreciation	36.57	43.80	68.89	102.94	128.39

Advance Against Depreciation

Petitioner's Submission

3.122 The Petitioner has calculated advance against depreciation (AAD) during the Control Period, by considering the actual debt repayment and the depreciation recovered during the year. The summary of the same is provided in the table below.

Table 38: AAD submitted by DTL (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1/10th of the Loan(s)	58.49	62.75	107.62	234.84	292.96
Repayment of the Loan(s) as considered for working out Interest on Loan	48.06	30.02	36.28	175.38	0.00
Minimum of the Above	48.06	30.02	36.28	175.38	0.00
Less: Depreciation during the year	33.99	37.44	41.12	66.92	109.46
A	14.07	-7.42	-4.84	108.46	-109.46
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	96.57	126.59	162.87	338.25	0.00
Less: Cumulative Depreciation	333.23	370.67	411.78	468.28	577.74
B	-236.66	-244.08	-248.91	-130.03	-577.74
Min (A, B)/ Zero if Negative	0.00	0.00	0.00	0.00	0.00

Commission's Analysis

3.123 The Commission has not revised the calculation of AAD for FY 2007-08 to FY 2010-11 and the same will be dealt with along with the true up of depreciation and RoCE at the end of the extended Control Period.

3.124 The Commission has calculated the AAD for FY 2011-12, using the principles specified in the MYT Regulations and considering the details of cumulative debt repayment and accumulated depreciation as approved in MYT Order and the projections of depreciation and debt for FY 2011-12. The Commission has concluded that no requirement for AAD would occur during the period, as is shown below:

Table 39: AAD approved by Commission for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved Now

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
1/10th of the Loan(s)	40.32	76.44	129.64	166.04	228.97
Repayment of the Loan(s) as considered for working out Interest on Loan	53.33	59.98	98.48	126.48	143.98
Minimum of the Above	40.32	59.98	98.48	126.48	143.98
Less: Depreciation during the year	36.57	43.80	68.89	102.94	128.39
A	3.75	16.19	29.59	23.54	15.59
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	125.85	185.84	284.32	410.80	554.78
Less: Cumulative Depreciation	335.82	379.62	448.51	551.45	679.84
B	(209.97)	(193.78)	(164.19)	(140.65)	(125.06)
Min (A, B)/ Zero if Negative	0.00	0.00	0.00	0.00	0.00

Return on Capital Employed

3.125 The Return on Capital Employed (RoCE) for the Petitioner shall be determined as specified in the MYT Regulations. The RoCE can be determined only after determination of the Regulatory Rate Base (RRB) for any particular year, and the Weighted Average Cost of Capital (WACC) for the year.

Working Capital Requirement

Petitioner's Submission

3.126 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) Actual Receivables for two months towards transmission tariffs; and
- (b) Actual Operation and Maintenance expenses for one month.

3.127 The working capital requirements of the Petitioner for each year of the Control Period, based on submissions made by the Petitioner, are as provided in the table below.

Table 40: Working Capital submitted by the petitioner for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
O&M Expenses	92.07	99.82	163.16	184.58	231.08
R&M Expenses	20.21	21.69	24.89	42.09	57.07

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
A&G Expenses	15.06	16.37	22.59	24.25	26.04
Employee Expenses	56.80	61.76	115.68	118.24	147.97
1/12 th of Total (A)	7.67	8.32	13.60	15.38	19.26
Receivables					
Annual revenues from Tariffs and Charges	182.84	162.85	179.87	398.24	656.97
Receivables equivalent to 2 months billing (B)	30.47	27.14	29.98	66.37	109.49
Total Working Capital (A+B)	38.15	35.46	43.58	81.76	128.75

Commission's Analysis

- 3.128 The Commission has approved the working capital in the MYT Order on normative basis for FY 2007-08 to FY 2010-11 using the approved O&M Expenses and expected revenues from Transmission Charges. The working capital for the FY 2007-08 to FY 2010-11 has not been revised.
- 3.129 For FY 2011-12 the Commission has considered the total approved O&M expenses of the Petitioner. The Commission has also considered the total receivables of the Petitioner for the year.

Table 41: Approved Working Capital for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved Now
O&M Expenses	91.26	114.11	108.23	135.62	206.34
1/12 th of Total	7.61	9.51	9.02	11.30	17.20
Receivables					
Annual revenues from Tariffs and Charges	182.91	162.93	179.93	398.32	1187.59
Receivables equivalent to 2 months average billing	30.49	27.15	29.99	66.39	197.93
Total Working Capital	38.08	36.65	39.00	77.68	215.13

Regulated Rate Base

Petitioner's Submission

- 3.130 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, the actual

capitalisation during FY 2007-08 to FY 2010-11 and projected capitalisation during FY 2011-12, as shown in the table below.

Table 42: Proposed RRB for the Control Period (Rs Cr)

Particulars	FY 2006-07 (Base Year)	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
OCFA	923.54					
Accumulated Depreciation	299.25					
Δ AB	65.90	33.26	109.10	44.11	1317.19	895.80
Capitalisation in the Year	95.67	67.24	146.54	85.23	1384.11	1005.26
Depreciation	29.77	33.99	37.44	41.12	66.92	109.46
Change in WC		38.15	-2.69	8.12	38.18	47.00
Regulated Rate Base (closing)	690.19	744.96	813.45	898.17	1617.01	2770.49
Equity	180.00	200.17	244.13	269.70	684.94	986.51
Debt	3984.48	579.55	682.13	741.78	1710.66	2414.34
Rate of return on Equity		14.00%	14.00%	14.00%	14.00%	14.00%
Rate of Return on Debt		11.50%	11.50%	9.92%	10.50%	10.50%
WACC		12.14%	12.16%	11.01%	11.50%	11.52%
Return on Capital Employed		90.45	98.91	98.87	185.97	319.03

Commission's Analysis

- 3.131 Regulation 4.7(b) of MYT Regulations specifies that true up for Depreciation and RoCE shall be done at the end of the Control Period. Since the Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012, the true up shall only be carried out at the end of the extended Control Period.
- 3.132 However, the Commission observed that the formula used by the Petitioner for the calculation of RRB for FY 2007-08 is different from the formula used by the Commission in the MYT Order.
- 3.133 In the MYT Order, the Commission had considered change in Working Capital for calculation of RRB, the Petitioner has considered complete WC for the first year for calculation of RRB. Since FY 2007-08 was the first year for calculation of RoCE, the Commission's calculation was indeed erroneous and RRB should be calculated for the year considering the total working capital and not just change in working capital.

- 3.134 Further, the Commission has observed that in calculating the opening RRB for FY 2006-07 in the MYT Order, the Commission had wrongly considered the closing GFA and accumulated depreciation of FY 2006-07 in place of the opening GFA and accumulated depreciation for the year. The Commission has revised its calculation of RRB after correcting for the above anomalies.
- 3.135 The Commission has also approved the RRB for FY 2011-12 considering the revised opening RRB and approved capitalisation for the year. It has therefore, approved the rate base for each year of the Control Period, as shown below.

Table 43: Approved RRB for the Control Period (Rs Cr)

Particulars		FY 2006-07 (Base Year)	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
A	OCFA	827.87					
B	Accumulated Depreciation	269.48					
C	RRB (opening)	558.39	624.28	815.79	955.57	2089.02	2724.76
D = E-F	Δ AB	65.89	153.43	141.20	1131.11	597.06	594.94
E	Investments capitalized	95.67	190.00	185.00	1200.00	700.00	723.33
F	Depreciation	29.77	36.57	43.80	68.89	102.94	128.39
G	Change in WC		38.08	-1.43	2.34	38.68	137.45
H = C+D+G	RRB (Closing)	624.28	815.79	955.57	2089.02	2724.76	3457.15
I = C+D/2+G	RRB(i)		739.08	884.97	1523.47	2426.23	3158.68

Means of Finance

Petitioner's Submission

- 3.136 The Petitioner, in the additional information submitted to the Commission, has submitted the details of the actual drawl of new loans during FY 2007-08 to FY 2010-11. It has also submitted that 70% of investment would be made through debt taken from the planned funds of GoNCTD.

Commission's Analysis

- 3.137 While approving the projected debt requirement of the Petitioner in the MYT Order, the Commission had made the following observations:

“On analysis of loan details provided by the Petitioner, the Commission observed that the outstanding balance of “Loans from GoNCTD (Plan Funds)” in the books of accounts of the Petitioner for FY07 is different from the values approved by the

Commission. The mismatch is due to disallowances by the Commission for certain loans which were used for funding revenue expenditure and not capital investment.

The Commission has, considered the outstanding balance of loans taken from GoNCTD for capital investment as approved by the Commission in true-up of FY07 for projecting the outstanding loan in each year of the Control Period.

For the purpose of projecting future debt requirement, the Commission has considered that 70% of the capital investment for each year is funded through debt."

- 3.138 Since the Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012, it will true up the capitalisation and capital expenditure during FY 2007-08 to FY 2010-11 only at the end of the extended Control Period. The approved debt requirement in the MYT Order for FY 2007-08 to FY 2010-11 are reproduced in the table below. The Commission has also approved the debt requirement of the Petitioner for FY 2011-12 by considering 70% of investment to be funded by debt.

Table 44: Approved Debt Requirement for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved Now
Base Capital Investment	152.00	880.00	640.00	400.00	723.33
Debt Requirement	106.40	616.00	448.00	280.00	506.33

- 3.139 The new loans to be taken by the Petitioner for proposed capital investment during the Control Period are assumed to be funded by GoNCTD in line with the approach followed in the MYT Order. The Commission has considered an interest rate of 11.50% for the new loans to be taken up by the Petitioner. The summary of outstanding loans at the end of each year from FY 2007-08 to FY 2010-11 approved by the Commission in the MYT Order and approved now for FY 2011-12 is provided below.

Table 45: Approved Loan Details (Outstanding) (Rs Cr)

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved Now
DPCL Loan						
Opening Balance	270.00	255.00	225.00	195.00	165.00	135.00
Addition	0.00	0.00	0.00	0.00	0.00	0.00
Repayment	15.00	30.00	30.00	30.00	30.00	30.00
Closing Balance	255.00	225.00	195.00	165.00	135.00	105.00

Particulars	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
GoNCTD Loans						
Opening Balance	265.13	277.48	360.54	946.56	1326.08	1509.59
Addition	31.68	106.40	616.00	448.00	280.00	506.33
Repayment	19.33	23.33	29.98	68.48	96.48	113.98
Closing Balance	277.48	360.54	946.56	1326.08	1509.59	1901.94
Total	532.48	585.54	1141.56	1491.08	1644.59	2006.94

Determination of WACC and RoCE

Petitioner's Submission

3.140 The Petitioner has submitted calculation for RoCE for FY 2007-08 to FY 2011-12. It has also considered the cost of equity at 14%, cost of debt at 11.5% and the debt-equity ratio to obtain the weighted average cost of capital (WACC) for each year of the Control Period.

3.141 It has also submitted that for the FY 2006-07, debt includes loan amounting to Rs.3452 Cr from GNCTD. However, for the purpose of calculating weighted average cost of capital the amount of Rs 3452 Cr, now converted into equity from loan, has been excluded from equity and debt. Further, for the FY 2010-11, equity includes Rs.239 Cr loan of GNCTD converted into equity vide GNCTD Letter no. F.11 (28)/2005/Power Ot.I/937 dated 16/07/10 & Rs. 80 Cr as equity infusion by DPCL.

3.142 The RoCE computation approved by Commission in the MYT Order for FY 2007-08 to FY 2010-11 and the projected cost for FY 2011-12 is given below.

Table 46: Proposed RoCE for the Control Period (Rs Cr)

	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
RRB		744.96	813.45	898.16	1617.00	2770.50
Equity	180.00	200.17	244.13	269.70	684.93	986.51
Debt	532.48	579.55	682.12	741.78	1710.66	2414.34
Rate of Return on Equity		14.00%	14.00%	14.00%	14.00%	14.00%
Rate of Return on Debt		11.50%	11.50%	9.92%	10.50%	10.50%
WACC		12.14%	12.16%	11.01%	11.50%	11.52%
RoCE		90.45	98.91	98.87	185.97	319.03

Commission's Analysis

- 3.143 The Regulation 4.7(b) of MYT Regulations specifies that true up for Depreciation and RoCE shall be done at the end of the Control Period. Since the Commission has extended the MYT Regulations and the Control Period for a further period of one year up to March 31, 2012, the true up shall only be carried at the end of the extended Control Period.
- 3.144 The Commission has noticed that in calculating the RoCE in the MYT Order it has inadvertently considered closing value of debt and equity whereas it should have considered average of debt and equity for calculation of WACC. The Commission has now corrected this anomaly.
- 3.145 The table below summarises the revised RoCE approved by the Commission for the Control Period.

Table 47: Approved RoCE for the Control Period (Rs Cr)

Particulars		FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
		Base Year	Approved Now	Approved Now	Approved Now	Approved Now	Approved Now
A	RRB _i		739.08	884.97	1523.47	2426.23	3159.68
B	Amount Capitalised During the year	95.67	190.00	185.00	1200.00	700.00	723.33
$C_n = C_{n-1} + (B_n * 30\%)$	Equity (Closing)	180.00	237.00	292.50	652.50	862.50	1079.50
	Equity (Average)		208.50	264.75	472.50	757.50	971.00
$D_n = D_{n-1} + (B_n * 70\%)$	Debt (Closing)	532.48	665.48	794.98	1634.98	2124.98	2631.31
	Debt (Average)		598.98	730.23	1214.98	1879.98	2378.14
E	Rate of Return on Equity		14.00%	14.00%	14.00%	14.00%	14.00%
F	Rate of Return on Debt		11.50%	11.50%	11.50%	11.50%	11.50%
$G = \frac{E * (C/(C+D)) + F * (D/(C+D))}{1}$	WACC		12.15%	12.17%	12.20%	12.22%	12.22%
$H = A * G$	RoCE		89.76	107.66	185.86	296.44	386.27

Capitalisation of Expenses & Interest Charges

Petitioner's Submission

- 3.146 The capitalisation of interest and other expenses as submitted by the Petitioner is given in the table below. While the Petitioner has provided the information regarding interest and expenses capitalised in the Petition, the same have not been deducted from the total expenses while arriving at the ARR for the year.

- 3.147 During the technical validation session the Commission requested the Petitioner to submit reasons for not deducting expenses capitalised from the ARR. The Petitioner has submitted that in the MYT period, the principle of RoCE is being followed which allows return on assets capitalised. Any interest cost incurred before capitalisation is considered as interest during construction (IDC) and is included in the assets base only after capitalisation. Hence interest capitalised has not been deducted from the ARR in the petition.

Table 48: Submitted Capitalisation of Interest and Other Expenses (Rs. Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Interest & Finance Charges Capitalised	1.98	4.82	3.53	64.65	52.78
Employee Expenses	8.50	13.68	2.63	8.27	8.27
A&G Expenses	1.50	2.42	0.46	1.46	1.46
Total	11.98	20.92	6.62	74.38	62.51

Commission's Analysis

- 3.148 Interest expenses of the Petitioner can be divided into two parts – interest expenses for loan on Capital Works in Progress and interest expenses for loan on assets capitalised.
- 3.149 In the Policy Direction Period, the Commission was allowing total interest expenses incurred by the licensee under total revenue requirement and subtracting interest expenses for loan on the Capital Works in Progress as it was capital in nature (interest capitalised) and was added to the cost of the asset as Interest During Construction.
- 3.150 In the MYT regime, the Commission is following the principle of Return on Capital Employed (RoCE) as per the MYT Regulations, under which it approves return on equity and interest on loan only for assets capitalized and allows them in the Aggregate Revenue Requirement of the licensee. Any interest cost incurred before capitalisation is considered as interest during construction and would be added to the cost of the assets.
- 3.151 Thus interest capitalised has been erroneously deducted from the ARR of the Petitioner in the MYT Order. The same has been rectified by the Commission while approving ARR for FY 2011-12. Therefore, a total of Rs 354 Cr, deducted as interest capitalised from the ARR of the Petitioner for FY 2007-08 to FY 2010-11 has been added back to the ARR for FY 2011-12 of the Petitioner.
- 3.152 However, A&G and employee expenses capitalised during each year must be reduced from the ARR, as has been done by the Commission in the MYT Order. For capitalizing the Employee and A&G Expenses for FY 2011-12 the Commission has again considered the capitalisation of Employee and A&G Expenses submitted by the Petitioner and has adjusted the same by first considering the ratio of approved asset capitalisation and asset capitalisation proposed by the Petitioner and then by approved Employee/ A&G Expenses and that proposed by the Petitioner.

- 3.153 The summary of the A&G, Employee Expenses and Interest Charges capitalised by the Commission is provided in the table given below.

Table 49: Expense Capitalisation Approved Now for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Revised Interest & Finance Charges Capitalised	0.00	0.00	0.00	0.00	0.00
Employee expenses	2.84*	9.30*	43.06*	20.25*	8.96
A&G Expenses	0.00*	0.00*	0.00*	0.00*	0.87
Total	2.84	9.30	43.06	20.25	9.83

*As approved in MYT Order

Rebate on Transmission/ Wheeling of Power

Petitioner's Submission

- 3.154 The Petitioner has submitted that it has given rebate to DISCOMS on wheeling of power up to December, 2007 for an amount of Rs. 1.81 Cr as per the provisions of MYT Regulations and rebate for an amount of Rs. 2.5 Cr p.a. in FY 2010-11 and FY 2011-12 as per the provisions of Bulk Power Transmission Agreement (BPTA) executed between DTL and DISCOMS. It has included the same as an expense in the ARR.

Commission's Analysis

- 3.155 Regarding the Rebate on Transmission/Wheeling of Power the Commission had clarified its position in the MYT Order and stated that:

"The Commission acknowledges the rebate given to the DISCOMS is a commercial arrangement, and cannot be passed through in tariffs. Hence, no rebate has been allowed for the Control Period."

- 3.156 Thus no rebate has been allowed in the ARR for FY 2011-12 as well.

Non Tariff Income (NTI)

Petitioner's Submission

- 3.157 The Petitioner has submitted that Non tariff income includes recovery from employee on account of water charges, license fee, sale of tender documents, and forfeiture of EMD etc. It has submitted the actual NTI for FY 2007-08 to FY 2010-11 and projections of the aforesaid items of non tariff incomes for FY 2011-12, as given below.

Table 50: Non Tariff Income submitted by the Petitioner (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Interest Income from Investment	0.92	0.82	0.41	0.39	0.32
Other Income	0.45	4.86	4.53	2.18	2.18
<i>Interest on loans and Advances to Staff</i>	<i>0.01</i>	<i>0.01</i>	-	-	-
<i>Gain on Sale of Fixed Assets</i>	-	-	3.29	-	-
<i>Miscellaneous receipts</i>	<i>0.44</i>	<i>4.85</i>	<i>1.24</i>	<i>2.18</i>	<i>2.18</i>
<i>Interest on Fixed deposits</i>	-	-	-	-	-
Total Non Tariff Income	1.37	5.68	4.94	2.57	2.50

Commission's Analysis

3.158 The true up for NTI for FY 2007-08 to FY 2011-12 shall be carried out by the Commission at the end of the extended Control Period. For FY 2011-12, the Commission has analysed the submissions made by the Petitioner and has approved the NTI as submitted by the Petitioner.

Table 51: Approved Non-Tariff Income for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved in MYT Order	Approved Now
Interest on Staff Loans & Advances	0.03	0.03	0.03	0.04	
Income from Investments	1.33	1.23	0.61	0.59	0.32
Interest on Fixed deposits	4.32	4.75	5.23	5.75	
Income from sale of scrap	0.00	0.00	0.00	0.00	
Miscellaneous Receipts	3.60	3.96	4.35	4.79	2.18
Total	9.28	9.97	10.22	11.17	2.50

Revenue from Other Charges

Petitioner's Submission

3.159 The Petitioner has projected revenue of Rs 2.61 Cr from Open Access Charges for FY 2011-12 and has reduced the same from the ARR.

Commission's Analysis

3.160 The revenue from Open Access Charges has to be shared by the Petitioner with the long term customers. The same need not be included in the ARR of the Petitioner.

Aggregate Revenue Requirement

Petitioner's Submission

3.161 The table given below provides a summary view of the Aggregate Revenue Requirement (ARR) as submitted by the Petitioner for the Control Period for FY 2007-08 to FY 2011-12.

Table 52: ARR for the Control Period (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
O&M Cost	92.07	99.82	163.16	184.58	231.08
Depreciation	33.99	37.44	41.11	66.92	109.46
Advance Against Depreciation	-	-	-	-	-
Rebate on Sale/Wheeling of Power	1.81	-	-	2.5	2.50
Other items	-	-	-	-	-
a) Prior period Income/Expense	-1.65	-0.73	18.98	-	-
b) Prior period income of SLDC Income included in prior period	-0.04	0.02	-	-	-
c) Provision for assets under dismantling	4.60	4.89	-	-	-
d) Expenditure on DSIDC Bawana –I	-	-	-	7.64	-
ROCE	90.45	98.91	98.87	185.97	319.03
Less: Interest & Other Expense Capitalized	-	-	-	-	-
Less: Non Tariff Income	-1.37	-5.68	-4.94	-2.57	-2.50
Income Tax Provisions	-	-	-	-	-
Revenue from other charges	-2.44	-2.87	-2.51	-2.61	-2.61
Revenue Requirement	217.42	231.80	314.68	442.43	656.96

Commission's Analysis

3.162 A summary view of the Revenue Requirement as approved by the Commission for the Control Period including the revision in various costs for the period FY 2007-08 to FY 2010-11 is provided in Table 54 below.

3.163 The Commission has also allowed carrying cost on account of revision in ARR from FY 2007-08 to FY 2010-11 @ 11.50% p.a. The total amount on account of revision in ARR from FY 2007-08 to FY 2010-11, including the carrying cost is shown in Table 53.

Table 53: Additional Amount Allowed on account of Revision in ARR from FY 2007-08 to FY 2010-11 including carrying cost (Rs Cr)

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
Opening Gap	0.00	24.31	102.61	299.89
Additions During the Year	22.98	71.41	175.39	142.39
<i>O&M Expenses</i>	<i>0.35</i>	<i>-12.03</i>	<i>45.55</i>	<i>37.05</i>

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
<i>Return on Capital Employed</i>	-3.40	-3.36	-3.52	-3.39
<i>Interest Capitalized</i>	26.03	86.80	133.36	108.73
Rate of Interest (%)	11.50%	11.50%	11.50%	11.50%
Carrying Cost	1.32	6.90	21.89	42.67
Closing Gap	24.31	102.61	299.89	484.95

Table 54: Approved ARR for the Control Period (Rs Cr)

Particulars	FY 2007-08			FY 2008-09			FY 2009-10			FY 2010-11			FY 2011-12
	Approved in MYT Order	Approv ed Now	Difference	Approved in MYT Order	Approv ed Now	Difference	Approved in MYT Order	Approv ed Now	Difference	Approved in MYT Order	Approv ed Now	Difference	Approved Now
Operation & Maintenance Costs	91.26	91.61	0.35	114.11	102.07	-12.03	108.23	153.78	45.55	135.62	172.67	37.05	206.34
Depreciation	36.57	36.57	0.00	43.80	43.80	0.00	68.89	68.89	0.00	102.94	102.94	0.00	128.39
Total Expenditure	127.83	128.18	0.35	157.90	144.72	-12.03	177.12	250.96	45.55	238.56	275.61	37.05	334.73
Return on Capital Employed	93.16	89.76	-3.40	111.02	107.66	-3.36	189.39	185.86	-3.52	299.83	296.44	-3.39	386.27
Less: Interest & other expenses capitalized	28.87	2.84	-26.03	96.10	9.30	-86.80	176.42	43.06	-133.36	128.98	20.25	-108.73	9.83
Less: Non Tariff Income	9.28	9.28	0.00	9.97	9.97	0.00	10.22	10.22	0.00	11.17	11.17	0.00	2.50
Net Aggregate Revenue Requirement	182.84	205.83	22.98	162.85	233.11	70.25	179.87	383.55	203.68	398.24	532.94	134.69	708.67
Pension Trust Arrears													150.00
Additional Amount Allowed due to Revision of ARR for FY 2007-08 to FY 2010-11(Table 53)													484.95
Additional Amount Allowed on account of Prior Period Liability													(156.04)
Total Amount Recoverable													1187.59

A4: TRANSMISSION TARIFF DESIGN

- 4.1 The transmission tariff payable by the beneficiaries of the transmission system has been designed in order to recover the Aggregate Revenue Requirement approved by the Commission for FY 2011-12.
- 4.2 This section details out the methodology adopted by the Commission for designing and approving the Transmission Service Charge.
- 4.3 The Commission has determined tariffs following the approach contained in the MYT Regulations.

Transmission Tariff Design and Allocation

- 4.4 The approved revenue requirement of the transmission business of the Petitioner for each year of the Control Period shall be recovered through tariffs from the users/beneficiaries of the transmission system in Delhi i.e. BRPL, BYPL, NDPL, NDMC, MES and long term open access customers, if any.
- 4.5 The Clause 6.6 of the Transmission Regulation states that “*The Annual Transmission Service Charge (ATSC) shall be divided between Beneficiaries of the Transmission System on monthly basis based on the Allotted Transmission Capacity or Contracted Capacity, as the case may be.*”
- 4.6 In view of the above, the Petitioner may raise the bills for Annual Transmission Charges for each year of the Control Period on the basis of the ARR approved by the Commission for the respective years, as provided in the table below.

Table 55: Approved ARR for FY 2011-12 (Rs Cr)

Particulars	FY 2011-12
Net ARR for Transmission Business*	708.67
Payment to Pension Trust	150.00
Past Arrears	328.91
Total Expenses allowed	1187.59

**excluding payment to pension trust and Past arrears*

- 4.7 All of the above charges (Rs 1187.59 Cr) shall be recovered every month on pro-rata basis and shall be shared by all the Distribution Licensees (long term transmission users) including deemed licensees in proportion to the generating capacity allocated from the various Central Sector Generating Stations, Generating Stations within Delhi and Contracted power on bilateral basis.
- 4.8 The charges from short term open access customers, if any, shall be recovered in line with the provisions mentioned in the MYT regulations.
- 4.9 The transmission service charge (Net ARR for Transmission Business – Rs 708.67 Cr) shall be recovered fully, only if the transmission system availability is 98% or

above, as specified in the MYT regulations. The charges shall be recovered on a pro rate basis in case the availability is lower than the target level.

Sample Bill for Monthly Transmission Charges

4.10 A sample bill for the calculation and recovery of monthly transmission charges from the Distribution licensees is explained below.

Table 56: Sample Bill for calculating the monthly Transmission Charges

Billing of Transmission Charge for the month of XXX									
Aggregate Revenue Requirement (Rs. Cr)					708.67				
Monthly Charges Applicable (Rs. Cr)					59.05				
Past Adjustments (Rs. Cr)					39.90				
Net Monthly Charges (Rs. Cr)					98.95				
Licensees	Weighted Avg. Entitlement in Generating Stations within Delhi		Weighted Avg. Entitlement in CSGS Stations & Long term open access capacity approved		Contracted power on bilateral basis		Total Weighted Avg. Entitlement		Allocation of Monthly Charges
	MW	%	MW	%	MW	%	MW	%	
BRPL	100	29%	200	40%	70	47%	370	37%	
BYPL	100	29%	150	30%	50	33%	300	30%	
NDPL	75	21%	150	30%	30	20%	255	26%	
NDMC	50	14%	0	0%	0	0%	50	5%	
MES	25	7%	0	0%	0	0%	25	3%	
Total	350	100%	500	100%	150	100%	1000	100%	

A5: DIRECTIVES

- 5.1 The Commission issues the following directives in this Tariff Order:
- 5.2 The Commission takes note of the fact that the schemes during pre extended MYT period i.e. FY 2007-08 to FY 2010-11 have been delayed and hence directs the Petitioner to take up all possible steps to ensure that the projects/schemes shall be completed at the earliest, so as to optimize cost on account of Interest during construction (IDC).
- 5.3 The Commission directs the DTL to seek approval of the Commission for all schemes as per the terms and conditions of the License.
- 5.4 The Commission DTL to carry out detailed study for formulating Capital expenditure plan for Transmission & sub-transmission system network for next MYT period, keeping in view the load growth in the area. For this, DTL shall consider the transformation capacity already added in the extended MYT period, up to FY 2011-2 as the gross GFA of DTL is already on higher side compared to policy direction period. DTL shall ensure that by implementation of these schemes, their losses are reduced to a reasonable level.
- 5.5 The Commission directs the DTL to submit the quarterly progress reports for the schemes being implemented during each year of the Control Period within 15 days of the end of each quarter. DTL is further, directed to submit the actual details of capitalisation for each year for the Control Period by June 30 of the following year for consideration of the Commission. All information regarding capitalisation of assets is to be furnished in the formats prescribed by the Commission. These formats are to be submitted along with the necessary statutory clearances/ certificates of Electrical Inspector, etc. for all EHV & HV works and certificate of SLDC for commissioning/ commercial operation.
- 5.6 The Commission directs DTL to organize for scheme-wise completion and consequent capitalisation of the assets in consonance with the commissioning/commercial operation of the respective scheme which would be certified by the State Load Despatch Centre (SLDC) and considered as an element for calculation of transmission system availability of DTL.
- 5.7 The Commission directs the DTL to submit details of actual R&M works carried out at the end of each of quarter, within 30 days of the end of the quarter, as in the past.
- 5.8 DTL shall carry out routine preventive maintenance and protection testing of electrical equipments by making proper schedule to ensure that newly commissioned grid sub-stations as well as existing equipments live their useful life.
- 5.9 DTL shall maintain a high accuracy level of the energy metering by using CTs & PTs of appropriate accuracy for recording energy input to Distribution licensees. DTL shall carry out comprehensive testing of CTs & PTs, installed at various grid sub-stations as per the relevant testing procedure and norms and shall replace the CTs &

- PTs wherever any discrepancy is observed. Further, Energy meters shall be tested as per schedule.
- 5.10 DTL shall expedite installation of Nitrogen Injection Fire Protection System on power transformers as Commission has already accorded 'In-principle' approval and carry out preventive maintenance to minimize breakdown time, cost and improve the reliability of the transmission network.
- 5.11 The Commission directs the DTL to take up the issue of interest rate on Plan Funds with GoNCTD for appropriate reduction. It may also borrow from other lenders at a lesser rate of interest. DTL shall endeavour to optimize the expenditure on account of interest on short term loan by negotiating the interest rates.
- 5.12 The Commission has allowed a provisional consolidated amount of Rs. 150 Cr for all successor entities in ARR to DTL towards Pension Trust as a lump sum amount. DTL shall pass on this amount to Pension Trust and shall keep separate record of payment made to Pension Trust.
- 5.13 It has come to the notice of the Commission that some of the feeders supplying power to BYPL need to be metered. DTL is directed to ensure metering at sending end on all feeders of Distribution Licensees including BYPL and NDMC
- 5.14 The Commission directs the DTL to maintain a separate account for the reactive energy wheeled and the respective reactive charges levied to the Discoms.
- 5.15 The Commission directs the DTL to take up the issue of income tax refunds received by generating companies from which power has been purchased till FY07, for ascertaining their share in the refunds so received.