DELHI ELECTRICITY REGULATORY COMMISSION
Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi -17

Petition No. 46/2007

In the matter of :
Petition for approval of Aggregate Revenue Requirement and Multi Year Transmission Tariff for Delhi Transco Limited for the F.Y. 2007-08 to F.Y. 2010-2011.

AND

In the matter of:
Delhi Transco Limited
Shakti Sadan, Kotla Marg,
New Delhi – 110002.

Before
Delhi Electricity Regulatory Commission

Coram:

Sh. Berjinder Singh, Chairman & Sh. K. Venugopal, Member
Date of Order: 20th December, 2007

ORDER

The Commission having deliberated upon the Multi Year Tariff Petition filed for the Control Period of FY 2008-2011, alongwith the Business Plan for the said Control Period, and also the subsequent filing by the Petitioner during the course of the proceedings, and having considered the responses received from stakeholders, in exercise of the power vested under the Delhi Electricity Regulatory Commission (Terms & Conditions for Determination of Transmission Tariff) Regulations, 2007, read with the provisions of Electricity Act, 2003, hereby pass this Order signed, dated and issued on 20th day of December, 2007.

The Petitioner shall take immediate steps to implement the said Order, so as to make the revised tariffs applicable from 1st January, 2008.

This Order may be amended, reviewed or modified in accordance with the provision of the Electricity Act, 2003 and the Regulations made thereunder.

This Order shall be subject to the final outcome of AFR. No. 372/2007 before the Appellate Tribunal for Electricity.

Sd/-	Sd/-
(K. Venugopal)	(Berjinder Singh)
Member	Chairman

A1: INTRODUCTION

1.1 This Order relates to the Petition filed by the Delhi Transco Limited (hereinafter referred to as 'DTL' or 'TRANSCO') dated August 20, 2007 for approval of Aggregate Revenue Requirement and determination of Transmission Service Charges of DTL for the Control Period (FY08 to FY11) using Multi Year Tariff Principles and for true-up for FY06 and FY07.

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 a set of 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 Companies 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 Dispatch 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 Companies in a manner to take care of different load profiles of the Distribution Companies, 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 Companies 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 now 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 Discoms, vide the Commission's order dated March 31, 2007.

1.8 DTL has filed its Petition before the Delhi Electricity Regulatory Commission (hereinafter referred to as 'DERC or 'Commission') for determination of transmission tariff for the Control Period FY08 to FY11 under Section 62, 64 and 86 of the Electricity Act, 2003 (hereinafter referred to as the 'Act'), read with the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2007.

1.9 This Tariff Order relates to the determination of Transmission Tariff of the Petitioner for each year of the Control Period (FY08 – FY11) under the Multi Year Tariff regime.

1.10 The Commission has reviewed the operational and financial performance of the Petitioner for FY06 and FY07 and has done the truing-up for various parameters. It has finalised this Order based on the review and analysis of the past records, information, submissions, necessary clarifications submitted by the Petitioner and views expressed by various stakeholders.

Delhi Electricity Regulatory Commission

1.11 The Delhi Electricity Regulatory Commission was constituted by the Government of National Capital Territory of Delhi on March 3, 1999 and it became operational from December 10, 1999.

1.12 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

1.13 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.

1.14 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."

1.15 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.

Tariff Orders Issued by the Commission

1.16 After its inception, the Commission issued an Order on "Rationalisation of Tariff for DVB" on January 16, 2001. The Commission issued its Order on the Annual Revenue Requirement (ARR) for FY02 and Tariff Determination Principles for DVB for the period FY03 to FY06 on May 23, 2001.

1.17 The Commission issued its first Tariff Order after the notification of the Transfer Scheme and Policy Directions, on February 22, 2002 based on a Joint Petition for determination of the Bulk Supply Tariff (BST) and opening loss levels for the distribution companies. The Commission determined the BST applicable for sale of power from DTL to the three distribution companies, on the basis of the paying capacity of each distribution company.

1.18 After the Transfer Scheme of DVB was made effective (July 1, 2002), the Commission issued a Tariff Order on June 26, 2003 for approval of ARR of Delhi Transco Limited and determination of BST to be charged to the Discoms for FY03 (9 months) and FY04.

1.19 The Commission has subsequently issued Tariff Orders for DTL for FY05, FY06 and FY07 on June 9, 2004, July 7, 2005 and September 22, 2006 respectively. The key highlight of these orders was approval of differential BST for various Discoms, based on the principle of "ability to pay" to maintain uniform retail tariffs.

1.20 Subsequent to the new policy directions given to DERC by GoNCTD relating to transfer of bulk supply business from DTL to DISCOMs, the Petitioner filed a tariff petition with the Commission for approval of provisional wheeling charges for FY08 till such time Tariff Order is issued by the Commission for FY08 under the MYT regime. The Commission thus issued an interim Tariff Order on 9th May 2007 approving the provisional Annual Transmission Service Charges and State Load Dispatch Centre Charges for FY08.

1.21 The present Tariff Order shall determine the Aggregate Revenue Requirement of DTL for the period FY08 to FY11 and determine transmission tariff, to be applicable for the Control Period, as defined in the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2007.

1.22 The Transmission Charges levied by the Petitioner from April 1, 2007 to the date of issue of this order (based on the interim Tariff Order of May 9, 2007) shall be adjusted in the manner specified in this order.

The Coordination Forum

1.23 The Commission wrote to Government of NCT of Delhi (GoNCTD) on 1st April, 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.

1.24 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 16 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
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

1.25 In the above referred meetings, issues relating to arranging power to meet the demand of Delhi up to FY11 as well as other issues of common interests to ensure overall development of the power sector in Delhi were discussed. The Commission has through the Co-ordination Forum facilitated signing of Power Purchase Agreements (PPAs) for capacity of around 3600 MW which would provide power to Delhi with gradual commissioning of generating units commencing henceforth upto FY10. The details in this regard are furnished below:

Table 2: Arrangement of power for Delhi on Long Term Basis

S. No.	Name of the Project	Capacity Allocated to Delhi
1	Koldam Hydroelectric project of NTPC	83 MW
2	Tehri Hydoelectric project of THDC	95 MW
3	Dhauliganga HEP of NHPC	42 MW
4	Sewa-III HEP of NHPC	10 MW
5	Unchahar-III TPS of NTPC	24 MW
6	RAPP Unit 5 & 6 of NPC	50 MW
7	Parbati-II HEP of NHPC	65 MW
8	Bawana – CCGT Plant of IPGCL	1000 MW
9	Pragati Power-II Project-II of PPCL	330 MW
10	NCRTPP Dadri Extension of NTPC	880 MW
11	Tehri Pumped Storage Power Plant of THDC	600 MW
12	Kahalgaon Stage-II of NTPC	95 MW
13	Barh TPS of NTPC	155 MW
14	North Karanpura TPS of NTPC	157 MW
15	Koteshwar HEP of THDC	40 MW
16	Dulhasti HEP of NHPC	34 MW
	Total	**3660 MW**

1.26 All the above projects are being developed by various Central Power Sector Utilities (CPSUs)/ State Power Utilities (SPUs) and accordingly their tariff would be regulated by the Central Electricity Regulatory Commission (CERC)/ DERC. Further, Delhi has been allocated 200 MW power from Tala HEP. Besides the above projects from which power has been tied up, the Coordination Forum had also discussed projects like Combined Cycle Gas Project in Tripura, setting up of 2000 MW plant by Delhi in Chattisgarh etc. but no final decision could be arrived at in view of the projects being at the conceptual stage.

1.27 Further, a share of 750 MW from the 1500 MW joint venture project being set up at Jhajjar (Haryana) by M/s. Aravali Power Co. with Haryana, Delhi & NTPC as partners, has been agreed to in the Coordination Forum meetings. Apart from this, the Coordination Forum has authorised TRANSCO to enter into long term agreement with DVC for procurement of power with the quantum of 100 MW from December 2006 to September 2007 and gradually going upto 2500 MW on round the clock basis from DVC for a period of 25 years from the commissioning of the respective new generating units. Apart from this PPAs have been signed for various upcoming projects of NHPC as well. Delhi is allocated about 500 MW of power from one of the Ultra Mega projects. This tie-up of additional capacity together with system augmentation/upgradation would significantly improve the power availability in Delhi in future.

1.28 The Commission has also worked through the Coordination Forum to remove bottlenecks in the execution of various major schemes such as setting up of 2 nos. 220 kV GIS sub-stations at Electric Lane and Trauma Centre/AIIMS in NDMC area and up gradation of Ridge Valley Sub-station to 220 KV GIS type. The issue of execution of dedicated transmission system for evacuation of power to Delhi from the upcoming projects at Dadri (NTPC) and Jhajjar (Aravali Power Co.) has been discussed in the Coordination Forum meeting held on November 23, 2007. Considering the criticality of the power from these Projects for meeting the power demand of Delhi specifically at the time of Commonwealth Games scheduled for October 2010, the Commission has taken up the matter with the State Govt. as well as Central Govt. / Ministry of Power for necessary intervention in the matter.

1.29 The Coordination Forum in its meeting held on October 25, 2005 decided that DISCOMs will jointly move a common proposal for seeking bids for procurement of power on short-term as well as long term basis. The document for short/medium term power procurement was received in the Commission by the end of March 2006, and was subsequently discussed in various Coordination Forum meetings. After detailed deliberations on various issues involved in the procurement process and approval of the Commission to the bid document for short/medium term power procurement, the DISCOMs were accordingly authorized in August, 2006 to invite bids. This exercise is in compliance with the National Electricity Policy/Tariff Policy which mandates the distribution companies to procure power through competitive bidding. The approval of procurement of power by the DISCOMs on long term basis is currently underway.

Multi Year Tariff Framework

1.30 The distribution part of the electricity sector in Delhi was privatized with effect from July 1, 2002 and tariffs in Delhi were governed by the Policy Directions issued by Government, vide its notification of November 22, 2001 and as amended on May 31, 2002.

1.31 Although the Act was passed in 2003, it ensured that provisions of the enactments specified in the DERA (Delhi Act No. 2 of 2001), not inconsistent with the provisions of the Act remained applicable to Delhi, as it was part of the Schedule referred to in Section 185 of the Act.

1.32 As the validity of these notifications ended on March 31, 2007, the Commission decided to adopt Multi Year Tariff (MYT) principles for determination of tariffs, in line with the provisions in Section 61 of the Act.

1.33 The Commission designed the MYT framework in the State and set long term performance targets for entities engaged in generation, transmission and distribution. Simultaneously, the Commission segregated costs into two categories- first which are expected to be easily controlled by the entity and a second category over which an entity does not have significant control. The Controllable parameters for DTL are Operation and Maintenance Expenses, Return on Capital Employed, Depreciation and Availability of Transmission System.

1.34 The Commission, however, shall also provide for true-up of employee expenses based on the recommendations of the 6th Pay Commission. All other components of the Operation and Maintenance expenses are controllable in nature and shall not be revised later, based on actuals/ subsequent submissions made by the Petitioner.

1.35 The MYT framework is also designed to provide predictability and reduce regulatory risk. This can be achieved by approval of a detailed capital investment plan for each entity, considering the expected network expansion and load growth during the Control Period. The longer time span enables the Transmission Company to propose its investment plan with details on the possible sources of financing and the corresponding capitalization schedule for each investment.

Multi Year Tariff Regulations

1.36 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.

1.37 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.

1.38 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 FY08 – FY11 after going through the Public Hearing process.

Filing of Tariff Petition for the Control Period

Procedural Background

1.39 DTL filed its Multi Year Tariff Petition for determination of Transmission Tariff for the Control Period (FY08 – FY11) on August 20, 2007 before the Commission. The Commission admitted the Petition on August 24, 2007 and sent a list of queries for additional information/ clarification on various issues in the Petition. The Petitioner has not submitted any proposal for reactive energy charges as stipulated in the MYT Regulations.

Interaction with the Petitioner

1.40 The Commission interacted regularly with the Petitioner, in both written and oral form, to seek clarifications and justification on various issues essential for the analysis of the tariff petition.

1.41 The Commission conducted multiple validation sessions with the Petitioner between August and December 2007, during which the discrepancies and additional information required by the Commission were highlighted. The Petitioner submitted its replies to the list of queries of the Commission raised in these sessions.

1.42 As part of the discussions, the Commission provided an opportunity to the Petitioner to validate the data submitted for true-up and provide documentary evidence to substantiate its claims regarding various submissions. The Commission and the Petitioner also discussed key issues related to the petition, which included details of capital expenditure and capitalisation plan, incentives and refunds obtained for past power purchase from CPSUs, transition support of Rs. 3452 Cr. provided by GoNCTD, segregation of accounts for the SLDC, etc.

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

Table 3: List of Correspondence with DTL

Sl No	Date	Letter No.	Subject
1	20 Aug 2007	DTL/203/07-08/Opr. DGM(Comm)/F-10/19	Multi Year Tariff for determination of Wheeling Charges for Delhi Transco Ltd. along with the Business Plan for the Control Period 2007-11
2	05 Sep 2007	F.DTL/203/F-10/2007-08/Opr.GM(Comml)/133	ARR Petition for MYT & Tariff Determination
3	13 Sep 2007	F.DTL/203/F-10/2007-08/Opr.GM(Comml)/140	ARR Petition for MYT & Tariff Determination
4	19 Sep 2007	F.DTL/203/F-10/2007-08/Opr.GM(Comml)/143	ARR Petition for MYT & Tariff Determination
5	01 Oct 2007	F.DTL/203/F-10/2007-08/Opr.GM(Comml)/158	ARR Petition for MYT & Tariff Determination
6	01 Oct 2007	F.DTL/203/F-10/2007-	MYT Petition for determination of wheeling charges for

		08/Opr.GM(Comml)/159	DTL along with the Business Plan for the Control Period for FY 2007-11 – Public Response on the Petitions.
7	01 Oct 2007	F.DTL/203/F-10/2007-08/Opr.GM(Comml)/160	MYT Petition for determination of wheeling charges for DTL along with the Business Plan for the Control Period for FY 2007-11 – Public Response on the Petitions.
8	04 Oct 2007	F.DTL/207/2007-08/GM(SLDC)/F-45/561	MYT Petition of DTL for the period 2007-11
9	05 Oct 2007	F.DTL/203/F-10/2007-08/Opr.GM(Comml)/166	ARR Petition for MYT & Tariff Determination
10	17 Oct 2007	F.DTL/F-10/2007-08/DGM(Comml)/176	ARR Petition for MYT & Tariff Determination
11	17 Oct 2007	F.DTL/F-10/2007-08/DGM(Comml)/177	Capitalization of the assets for the FY 2005-06
12	31 Oct 2007	F.DTL/F-10/2007-08/DGM(Comml)/186	Capitalization of the assets for the FY 2006-07
13	05 Nov 2007	F.DTL/203/F-10/2007-08/Opr.DGM(Comml)/192	Capitalization of the assets for the FY 2005-06
14	07 Nov 2007	F.DTL/203/2006-07/Opr (Manager(T&C))/F-10/194	ARR Petition for MYT & Tariff Determination
15	07 Nov 2007	F.DTL/203/2006-07/Opr (Manager(T&C))/F-10/195	ARR Petition for MYT & Tariff Determination
16	20 Nov 2007	F.DTL/203/F-4/2007-08/Opr.DGM(Comm)/199	DTL's Reply/Clarification on BYPL comments on DTL's ARR, Business Plan, MYT for the Control Period FY 07-08 to FY 10-11
17	20 Nov 2007	F.DTL/203/F-3/2007-08/Opr.DGM(Comm)/200	DTL's Reply/Clarification on BRPL comments on DTL's ARR, Business Plan, MYT for the Control Period FY 07-08 to FY 10-11
18	20 Nov 2007	F.DTL/203/F-10/2007-08/Opr.DGM(Comm)/201	Capitalization of the assets for the FY 2006-07
19	22 Nov 2007	F.DTL/203/F-10/2007-08/Opr.DGM(Comm)/203	Capitalization of the assets for the FY 2006-07
20	23 Nov 2007	F.DTL/203/F-10/2007-08/Opr.DGM(Comm)/204	MYT Petition for the Control Period FY 2006-07 to FY 2010-11

Public Hearing

1.44 The Petitioner published a Public Notice on September 1, 2007 detailing the salient features of its tariff petition in the following newspapers:

(a) Times of India (English)

(b) Indian Express (English)

(c) Financial Express (English)

(d) Jansatta (Hindi)

(e) Dainik Jagran (Hindi)

(f) Quami Awaz (Urdu)

1.45 Copies of the Public Notice in English, Hindi and Urdu are enclosed in Annexure No. 1 to this order.

1.46 The notice also invited suggestions and objections from the public on the tariff petition filed by the Petitioner in accordance with Section 64 (3) of the Act. The interested parties/stakeholders were asked to file their objections and suggestions on the petition by September 25, 2007.

1.47 The Petitioner/ Commission received objections from 4 respondents, some of which were received after the deadline for receipt of comments. All parties, who had filed their objections /suggestions, were informed about the date, time and venue for presenting their case in the public hearing. The Petitioner replied to the comments received and submitted a copy of its replies to the Commission.

1.48 A public hearing was held at the Commission's Court Room on October 3, 2007 to discuss the issues related to the tariff petition filed by the Petitioner for determination of Transmission Tariff for the Control Period, and for final truing-up up to FY07.

1.49 The issues and concerns voiced by various objectors have been carefully examined by the Commission. The major issues discussed during the public hearing, through the objections raised by the respondents and the observations made by the Commission, have been summarized in Chapter A2.

Layout of the Order

1.50 This order is organised into six chapters:

(a) The first chapter provides a historical background including information regarding the Commission, a snapshot of the MYT framework and details of the tariff setting process;

(b) the second chapter gives a detailed account of the Public Hearing process, including the objections raised by various stakeholders, Petitioner's responses and the Commission's views on the responses;

(c) the third chapter details the process of true-up for the previous years (FY06 and FY07);

(d) the fourth chapter analyses the Aggregate Revenue Requirement for the Control Period and determination of Transmission Service Charge for the Control Period;

(e) the fifth chapter details the possible options for determination of Transmission Service Charge, and the approach adopted by the Commission for the Control Period; and

(f) the sixth chapter presents the Directives of the Commission.

A2: OBJECTIONS AND ISSUES RAISED DURING THE PUBLIC HEARING PROCESS

2.1 The public hearing process is a platform to understand the problems and concerns of various stakeholders. The Commission has encouraged transparent and participative approach in the hearings, which are used to obtain necessary inputs required for tariff determination.

2.2 The Commission directed the Petitioner to make available copies of their MYT Petitions and issue a public notice inviting comments/objections from various stakeholders including the general public.

2.3 The following stakeholders filed written objections on the ARR and tariff petition. The issues raised along with the replies given to the objections by Petitioner are discussed in contextual sections that follow.

(a) North Delhi Power Limited (NDPL)

(b) BSES Rajdhani Power Limited (BRPL)

(c) BSES Yamuna Power Limited (BYPL)

(d) Panchsheel Enclave Residents' Welfare Association

2.4 The Petitioner submitted its responses to the various comments/ objections and a public hearing was held in the Commission's office on October 03, 2007 wherein respondents put forth their comments and objections before the Petitioner. The respondents were given an opportunity to be heard during the public hearing.

2.5 The major comments/ objections raised by various stakeholders and the Commission in response to the MYT petition submitted, the replies given by the Petitioner and the views of the Commission have been summarized under various categories as below:

Capital Expenditure

2.6 The Distribution Companies (BRPL, BYPL and NDPL) have submitted various objections against the capital investment proposal of the Petitioner. All the distribution companies pointed out that the investment projections during Control Period appear to be much higher than that obtained on the basis of past trends, load projection, etc. The distribution companies submitted that they have to plan their schemes/ capital investment based on DTL's investment plan and hence, the TRANSCO is required to provide details of major schemes it plans to take up.

Objections

2.7 The Distribution Companies submitted that the proposed capital investment by DTL for the Control Period (Rs. 2800 Cr) seems to be very high considering the capital investments of DTL in the past. They have raised concerns regarding the availability of funds, status of past orders, etc. BRPL and BYPL also pointed out that the average capital investment made by DTL during the last 5 years is Rs. 82.41 Cr which is significantly lower than the proposed capital expenditure during the Control Period.

2.8 NDPL submitted that Petitioner has proposed construction of new grid sub-stations at Mundka, DSIDC Bawana I, Bakhtawarpur, Chandrawal, Punjabi Bagh/ Peeragarhi, Rohini II and Wazipur during the Control Period. However, all sub-stations except Bawana I are proposed to be commissioned in FY11. In such a situation, NDPL will be unable to plan/ execute its network expansion to meet additional load demand during the first three years of the Control Period.

2.9 NDPL has also requested the Commission to review the capital investment program of DTL for the Control Period, pointing to the fact that high investment capitalization of Rs. 1581.13 Cr budgeted in FY11 would have significant impact on the Wheeling Tariff charged to the Discoms.

Petitioner's Response

2.10 The Petitioner has planned its capital expenditure for the Control Period to match the expected load requirements in line with the recommendations of the 17th Electric Power Survey, conducted by the CEA. The Petitioner has proposed investment to match the planning criteria of CEA, which specifies the installed capacity as 2.1 times the load requirement.

2.11 The Petitioner also submitted that the 220 kV DSIDC I Bawana sub-station will be commissioned within two months and NDPL can plan its capital investment in tune with the commissioning schedule of this sub-station.

2.12 The Petitioner has responded that the costs for various schemes have been estimated at current market prices and the total investment is higher due to factors such as: installation of GIS sub-stations, installation of underground cables instead of overhead lines in the city, etc. It shall fund the proposed capital expenditure through Plan Funds available from GoNCTD and additional debt from the market, if required.

Commission's Observations

2.13 The Commission notes the high investment proposed by the DTL, which would significantly increase the Transmission Service Charge (TSC) during the Control Period. It is of the view that capital investment in the Control Period should be considered based on future requirements, and not on the basis of past performance/ achievement. The Commission has also taken note of the fact that the schemes proposed by DTL are generally in line with the requirement of strengthening the transmission and sub-transmission system in Delhi, corresponding to the 11th Plan System Studies conducted by the Central Electricity Authority (CEA), as detailed in the report issued in March 2006.

2.14 In the public hearing, the Commission stated that it expects the distribution companies to propose their investments for the Control Period, in line with the investments proposed by DTL.

2.15 The Commission also requested the GoNCTD to provide details of the proposed funding of the capital investment of DTL during the Control Period.

2.16 The GoNCTD subsequently submitted its commitment of Rs. 1250 Cr (including Rs. 25 Cr for SLDC) as the total approved plan outlay for DTL in the 11th Five Year Plan period in a letter to the Commission dated October 16, 2007. It further clarified that the funding shall be provided in form of debt to DTL at an interest rate of 11.50%. The Government has also committed to provide additional funding in form of both debt and equity, if required for 100% of the capex program, based on future requirements.

2.17 The approved capital investment of DTL after detailed scrutiny of all the schemes has been provided in a subsequent chapter(s) in this order.

Objections

2.18 BRPL and BYPL have pointed out the differences in terms of capacity/ line addition and values of investment proposed by DTL in its MYT Petition and the Business Plan. They also submitted a summary of the difference highlighting that the mismatch between the increase in capacity proposed at grid sub-station and the increase in projected load. DTL has projected growth of 1128 MW during the Control Period, while it has planned capital investment for 6250 MVA (new) plus 1160 MVA (augmentation) i.e. which is more than 6.5 times.

2.19 BRPL and BYPL also submitted that DTL has not indicated any projects/ schemes planned for interconnecting new generation capacities proposed to be added to the Delhi system in the Control Period. It stated that schemes for interconnections to upcoming projects such as Dadri expansion, Aravali, Bamnauli, Bawana and Badarpur are part of the capital investment proposed by the Petitioner.

Petitioner's Response

2.20 The Petitioner submitted that the peak demand of Delhi is projected to be 7000 MW by FY12, based on studies conducted by the CEA. Therefore, DTL has proposed an increase in its transfer capacity from current level of 6400 MVA to 14000 MVA. This is required to meet the planning criteria set by CEA, wherein installed capacity is expected to be 2.1 times of the load requirement.

2.21 The Petitioner submitted that it has envisaged proper power evacuation systems from proposed projects (2500 MW from DVC, 750 MW from Jhajjar, 1000 MW from Dadri), as part of its capital investment plan. It also stated that the CEA has decided that a dedicated 400 kV D/C line shall be built by the Power Grid Corporation of India (PGCIL) for evacuation from the Aravali project.

2.22 During the public hearing, the Petitioner submitted to the Commission that the distribution companies had not signed Power Purchase Agreements with Central Generating Stations, Transmission Service Agreement with DTL and Bulk Power Transmission Agreement with PGCIL.

Commission's Observations

2.23 The Commission has analysed the Business Plan and the details of the capital investment proposed by the Petitioner for the Control Period. The Commission has considered the appropriate capital investment for the purpose of determination of ARR. The Petitioner would have to seek approval of the Commission for the proposed schemes as per the terms and conditions of the license.

2.24 The distribution companies clarified during the public hearing that the activities related to the signing of agreements with the respective agencies had been initiated and would be completed soon. The Commission directed the Petitioner to finalize the signing of agreements at the earliest.

2.25 The issue of execution of dedicated transmission system for evacuation of power to Delhi from the upcoming projects at Dadri (NTPC) and Jhajjar (Aravali Power Co.) was discussed in the 16th meeting of the Coordination Forum held on November 23, 2007. Considering the criticality of the power from these projects for meeting the power demand of Delhi, specifically in view of the upcoming Commonwealth Games, the Commission has taken up the matter with the State Govt. as well as the Ministry of Power, Govt of India for necessary intervention.

Objections

2.26 NDPL has expressed its concern regarding lack of space for switchyard expansion/ augmentation of DTL grid sub-stations at Kashmere Gate, Narela, Rohini, Subzi Mandi and Gopalpur grid sub-stations. Hence it submitted that no additional supply would be possible in the areas serviced by these grid sub-stations.

2.27 It further submitted that out of the grid sub-stations planned in Naraina, Shalimar Bagh and Kanjhawala, one/ two new bays are expected to be available for network expansion in command area of these grid sub-stations.

Petitioner's Response

2.28 The Petitioner submitted that due to lack of space in the above mentioned grid sub-stations; it has proposed to establish grid sub stations at alternate locations to provide additional capacity (e.g. new sub-stations at Chandrawal Workshop and Bakhtawarpur would provide relief to the Kashmere Gate, Subzi Mandi and Gopalpur grid sub-stations).

2.29 DTL submitted that it has proposed development of 33kV I/D (GIS) switchyard with 22 bays and installation of additional 160 MVA 220/66kV Power Transformer at Gopalpur sub-station. It has also proposed new sub-stations in Rohini Phase IV and Phase V, to reduce the load on existing Narela and Rohini sub-stations

2.30 The Petitioner also submitted that additional MVA capacity shall be available at the Naraina and Shalimar Bagh grid sub-stations as and when the same are energized.

Commission's Observations

2.31 The Commission facilitated discussions between the Petitioner and the Distribution companies to ensure that the investment proposed by all entities are in sync with each other and are optimised to ensure suitable transmission system availability and reliability for consumers of Delhi.

2.32 The meetings of the Steering Committee, headed by the GM (Planning), DTL have also been used as media for discussing the capital investment plans of various entities, to ensure proper linking of the plans of each entity of the electricity sector value chain.

2.33 The Commission also stated that it expects the Distribution Companies and the Petitioner, which is also the State Transmission Utility (STU), to co-ordinate and interact regularly with respect to the system planning to ensure no mismatch between the plans of various utilities.

Transmission Losses

Objections

2.34 The Distribution Companies have pointed that the transmission losses in the DTL system have been increasing each year and objected to the high levels of losses (0.8% - 1.2%) projected by the Petitioner for the Control Period, considering the proposed capital investment. The stakeholders also expressed concern regarding lack of any existing performance standards for DTL and requested the Commission to determine performance norms such as voltage levels, system availability, reactive power contribution, etc.

Petitioner's Response

2.35 The Petitioner presented documents detailing the total transmission losses in the DTL system in FY07. It submitted that on power purchase of 24629 MU, the total loss was 1036 MU, which includes loss corresponding to 787 MU in the PGCIL system and losses of 249 MU in the DTL system.

2.36 The Petitioner stated that losses in the DTL system were higher due to improper line loading by the Discoms. It submitted examples of poor loading of transformers by Discoms (drawl of 20 MVA from Kanjhawala sub-station against total capacity of 200 MVA). It submitted that line loading of NDPL is only 40-50% thereby leading to high losses.

Commission's Observations

2.37 The Commission has examined the submissions of the Petitioner to determine the transmission losses in the DTL system as well as the PGCIL losses in FY07. Since the Petitioner has no operational control over the losses in the PGCIL network, the Commission has determined the loss levels for the Control Period based on the existing losses, as confirmed by the SLDC.

2.38 Regarding the issue of poor utilisation of the transmission network by the distribution companies, the Commission has expressed its concern on the lack of co-ordination between various utilities and expects an improvement in system planning and utilisation in the future.

Incentives from CPSUs

Objections

2.39 The Commission sought details from the Petitioner about the amount received as incentive from the Central Power Sector Units (CPSUs) in FY07 and wanted clarifications whether it was linked to any future liabilities.

Petitioner's Response

2.40 The Petitioner submitted that it received Rs. 667.81 Cr on account of incentives from CPSUs for the period FY02 – FY05 as per the "one time settlement scheme".

Commission's Observations

2.41 This issue has been dealt at length in Chapter 3 of this order.

Operations & Maintenance Expenses

Objections

2.42 NDPL has raised concerns on the sharp increase in O&M expenses of the Petitioner in FY07 vis-à-vis the previously approved values. It requested the Commission to reject such a steep increase during true-up, as it would lead to significant tariff shock to retail consumers.

2.43 In addition, the distribution companies objected to the proposed increase in O&M expenses, thereby leading to high tariffs

Petitioner's Response

2.44 The Petitioner submitted reasons for the increase in O&M expenses during FY07. It submitted that the increase has been primarily on account of increase in different components of employee expenses such as Dearness Allowance, Terminal Benefits, etc. DTL also submitted that the high property tax has also led to an increase in its O&M expenses.

Commission's Observations

2.45 The Commission has analysed various components of O&M costs, for approval of the same for FY07 and for the Control Period. The Commission has approved O&M expenses of DTL in FY07, details of which are presented in the subsequent Chapter.

A3: TRUE-UP FOR FY06 AND FY07

Background

3.1 The Commission had approved the Annual Revenue Requirement of DTL for FY07 and determined the applicable Bulk Supply Tariffs (BST) for the year in its Tariff Order issued on September 22, 2006. The Tariff Order was based on the provisional data submitted by the Petitioner for costs to be incurred and revenues likely to be generated during FY07.

3.2 The Petitioner submitted its prayer for truing up cost and revenue elements approved for FY06 and FY07, as part of the MYT Petition.

3.3 Despite certain discrepancies and information gaps in the petition, the Commission admitted the same in order to expedite the tariff determination process. The Commission issued a deficiency note to DTL highlighting the shortcomings in the petition and directed it to submit clarifications and further information.

3.4 The Petitioner subsequently submitted various documents and responded to the queries raised by the Commission during detailed analysis of the petition. The Commission has considered various submissions made by the Petitioner during analysis of the petition for the purpose of true-up for various components of ARR to determine the revenue requirement of FY06 and FY07.

3.5 The Commission had trued-up values for FY06 in its Tariff Order issued on September 22, 2006 based on provisional accounts submitted by the Petitioner. The Commission has now trued-up expenses of FY06 based on audited accounts for the year FY06 using the mechanism for true-up as prescribed in previous tariff orders.

3.6 This chapter details the submissions of the Petitioner for true-up of various cost components for FY06 and FY07, analysis of the Commission and the final trued-up values. Detailed analysis of each component is given below.

Energy Sales and Revenue

3.7 The Commission, in the Tariff Order for DTL issued on September 22, 2006, had approved the total quantum of energy sales by DTL to the distribution companies in Delhi in FY07 as 21,367 MU. The Petitioner has submitted the energy sales in FY07 as 21,769 MU based on actuals.

3.8 The Commission verified the quantum of energy sales submitted by the Petitioner using the actual quantum of power purchased by various distribution companies. Hence, it has considered the actual power purchase quantity to determine the power purchase costs applicable to DTL for FY07.

3.9 The table below presents the break-up of the quantum of energy sales in FY07 as approved by the Commission for FY07, the actual sales figures and the values approved for true-up for FY07.

Table 4: Energy Sales (MU) in FY07

Discom	Approved	Actuals	True-Up
BRPL	8701	9122	9122
BYPL	5448	5298	5298
NDPL	5882	5986	5986
NDMC and MES	1337	1363	1363
Energy Sales in Delhi	**21,367**	**21,769**	**21,769**
UI and Sale to Other States	1672	1748	1748
Total	**23,039**	**23,517**	**23,517**

3.10 The Commission had estimated the revenues in FY07, based on the approved quantum of sales to Discoms and applicable BST as Rs. 4873 Cr. The Petitioner has now submitted the total revenue realized from the sale of power to Discoms as Rs. 4779 Cr. in FY07.

3.11 The Commission observed the reduction in revenue realisation of the Petitioner by Rs. 94 Cr despite an increase in quantum of sales by 402 MU in FY07 over the previously approved value.

3.12 The Petitioner clarified that the BST approved by the Commission for FY07 was made applicable only from October 1, 2006, and hence the energy supplied to the Discoms for the first half of FY07 (April to September 2006) was charged at the previous BST applicable for FY06, thereby leading to a lower revenue realisation than considered by the Commission in its Tariff Order.

3.13 The Commission notes the reason for reduction in revenues and accepts the reason provided by the Petitioner. The Commission also verified the revenue realisation of DTL from each distribution licensee against the power purchase costs submitted for FY07 as part of their individual petitions. Hence, the Commission has considered revenue realisation of DTL in FY07 as Rs. 4779 Cr for determination of revenue surplus/ gap of DTL for FY07. The following table contains details of revenue from sale of power by DTL in FY07. The BST are in Rs/ kVAh for NDMC and Rs/ kWh for others:

Table 5: Actual Revenues from Sale of Power to Discoms in FY07

Discom	Apr 06 – Sep 06			Oct 06 – Mar 07			Total Revenues
	BST	Sales (MU)	Revenues (Rs Cr.)	BST	Sales (MU)	Revenues (Rs Cr.)	
BRPL	221.01	5165	1142	241.22	3956	954	2096

BYPL	177.04	3078	545	200.11	2220	444	989
NDPL	211.21	3314	700	227.83	2672	609	1309
NDMC and MES	257.00	875 (MkVAh)	225	257.00	621 (MkVAh)	160	385
Total			**2611**			**2167**	**4779**

Table 6: True-Up of Revenues from Sale of Power to Discoms in FY07 (Rs Cr.)

Discom	Approved	True-Up
BRPL	2099	2096
BYPL	1090	989
NDPL	1340	1309
NDMC and MES	344	385
Total	**4873**	**4779**

Power Purchase

3.14 The Petitioner submitted details of power purchase from the following sources in FY07 to meet the power requirement of the state;

(a) Indraprastha Power Generating Company Limited (IPGCL)

(b) Pragati Power Corporation Limited (PPCL)

(c) Badarpur Thermal Power Station (BTPS)

(d) Central-sector generating stations (CGS) owned by NTPC, NHPC and NPC

(e) Nathpa Jhakri, Tehri and Tala Hydro Electric Power Stations

(f) Power trading companies, such as Power Trading Corporation, etc.

(g) Banking of power with other states, if any

(h) Bilateral purchases from other states like Orissa, Himachal Pradesh, etc.

3.15 The Commission obtained details of actual power purchase from various stations and the corresponding costs incurred, to determine the power purchase costs to be approved for FY07.

3.16 Refunds of income tax, if any, received from either the generating companies, transmission companies or income tax authorities shall be adjusted in the ARR of the Petitioner, in the year they are received. For this purpose, the Petitioner is directed to take up the issue with the generating companies from which power has been purchased till FY07, for ascertaining their share in the refunds so received.

3.17 The summary of power purchase in terms of quantum as well as costs for FY07, as determined by the Commission, is given in the tables below.

Table 7: Quantum of Power Purchase (MU) in FY07

Source	Approved	Actuals	True-Up
IPGCL	2,774	2,503	2,503
PPCL	2,377	2,190	2,190
BTPS	4,628	4,853	4,853
CGS, NJPC and Tehri	12,534	13,150	13,150
Bilateral & other sources	1256	1816	1816
Sub-total	**23,568**	**24,512**	**24,512**
UI transactions	(1,672)	(1,124)	(1,124)
Sales to other states		(624)	(624)
Total	**21,896**	**22,764**	**22,764**

Table 8: Power Purchase Cost (Rs Cr.) in FY07

Particulars	Approved	Actuals	True-Up
IPGCL	690	638	638
PPCL	476	479	479
BTPS	1151	1253	1253
CGS, NJPC & Tehri	2389	2589	2589
Bilateral & Other Sources	371	806	806
Sub Total	**5077**	**5765**	**5765**
UI & Sale to other states	(502)	(649)	(649)
Power Purchase Cost	**4575**	**5116**	**5116**
Other Costs			
PGCIL Transmission Charges	150	170	170
RLDC and ULDC Charges	13	13	13
Other Wheeling charges	2	1	1
Incentives	50	67	67
Income Tax	76	230	230
Open Access Charges	0	7	7
Reactive Energy	0	(4)	(4)

Particulars	Approved	Actuals	True-Up
Total Cost	**4867**	**5600**	**5600**

Incentive from CPSUs

3.18 As on February 28, 2001, several SEBs owed about Rs. 41,473 Cr to various CPSUs and the Indian Railways. Of this, the erstwhile Delhi Vidyut Board (DVB) had a total liability of Rs. 5380 Cr.

3.19 The Expert Group on the Settlement of SEB Dues envisaged a 'one-time settlement scheme' for recovery of these dues, based on which the DVB dues were securitised through issue of long term bonds by the State Government.

3.20 In the past, DTL had been making timely payments of its dues to the CPSUs and therefore, received an incentive in FY07, according to the provisions of the 'one-time settlement scheme'.

3.21 The Ministry of Power (MoP), Govt of India informed the GoNCTD regarding its decision on distribution of incentive from CPSUs under the 'one-time settlement scheme', vide letter dated December 5, 2005. The relevant extract from the letter is shown below;

"Regarding payment of incentive amount received by electric utilities under GoNCTD from the CPSUs under the one time settlement scheme, the incentives needs to be paid to DTL. It is internal to GoNCTD to distribute the incentive proportionately between DPCL and DTL in proportion to the liability they bear for discharging servicing of the securitized long term advances and making regular payment of current dues, respectively after the receipt of the same by DTL".

3.22 The entire incentive received by Delhi under this scheme was initially provided to DPCL. Based on recommendations of the MoP, the DPCL's board decided to share these incentives with DTL in proportion to the liabilities they bear in servicing the securitized long term advances and making regular payment of existing dues. Based on the said proportion, the ratio of sharing of incentive between DPCL and DTL was determined as 13:189.

3.23 The details of the incentive received by the Petitioner were not part of the MYT petition filed by DTL. However, the Petitioner introduced the same in the public notice, duly approved by the Commission, for publication in leading newspapers.

3.24 The Commission sought clarifications and further details from the Petitioner on the amount of incentives received from CPSUs. The Petitioner confirmed receipt of Rs. 667.82 Cr as incentive obtained from CPSUs.

3.25 The Commission had discussions with DTL regarding treatment of this amount and directed the Petitioner to clarify if there was any possible future liability associated with the incentive received, vide letter No. F.3(189)/Tariff/DERC/2007-08/2497 dated September 26, 2007.

3.26 The Petitioner submitted in its reply to the Commission that it had received its share of incentives amounting to Rs. 667.82 Cr and it also confirmed that there is no liability to be discharged by DTL against the receipt of the above.

3.27 The Commission is of the view that since the incentive received by the Petitioner was on account of the power purchase function, the benefits of the incentive should be considered as an adjustment to the Power Purchase cost and applied this amount of Rs 667.82 Cr accordingly.

3.28 The actual date of receipt of funds from the CPSUs has not been clearly mentioned in the petition. In view of the above, the Commission directs the Petitioner to submit details of actual receipt of the incentive amount as well as the time and the manner in which it was put to use. Any interest enjoyed on the incentive amount shall be adjusted during true-up, and therefore, the Petitioner is expected to take up the matter with the concerned agencies which obtained the benefit.

Excess RLDC and ULDC charges

3.29 The Commission had adjusted the excess RLDC and ULDC charges allowed to the Petitioner in the Tariff Order issued on September 22, 2006 based on the actual payments made to the RLDC and ULDC.

3.30 The Commission had examined the total admissible RLDC and ULDC charges for the period July 2002 to March 2006 as per the final charges approved by the CERC vide its Order dated September 2, 2005. On comparison of the same with the total RLDC and ULDC charges allowed to the Petitioner in its various Tariff Orders, the Commission arrived at the excess charges allowed to DTL was Rs. 3.45 Cr, as shown below.

Table 9: RLDC and ULDC Charges (Rs Cr.)

Period	Amount allowed by Commission in previous tariff orders	RLDC & ULDC charges, as per the CERC order dated 02/09/2005	Excess Allowance
2002-03 (9 months)	8.57	8.92	(0.35)
2003-04	18.75	14.39	4.36
2004-05	12.47	13.25	(0.78)
2005-06	12.82	12.60	0.22

Period	Amount allowed by Commission in previous tariff orders	RLDC & ULDC charges, as per the CERC order dated 02/09/2005	Excess Allowance
Total	**52.61**	**49.16**	**3.45**

Transmission Losses

3.31 The Commission had approved the transmission loss in the TRANSCO system in FY07 as 0.72% in the Tariff Order for DTL issued on September 22, 2006.

3.32 However, based on the details submitted by the SLDC on the total power purchase, power sold to Delhi and other states and UI transactions in FY07, the Commission has calculated the actual transmission losses in the DTL system to be 208 MU, which is equivalent to 0.95%.

3.33 The Petitioner submitted details of power purchase, energy sales and transmission losses for FY07. It has submitted actual external transmission losses in the PGCIL network as 787 MU.

3.34 The Commission directed the SLDC to provide details of the external transmission losses, incurred during power purchase in FY07. The SLDC submitted the actual external transmission losses in FY07 as 787 MU, vide letter No. F.DTL/207/2007-08/GM(SLDC)/F-45/561 dated October 4, 2007. The summary of loss calculation submitted by SLDC is as follows:

Table 10: External Transmission Losses in FY07

S. No.	Particulars	Unit	Actuals
	Power purchase outside Delhi		
1	CGS, NJPC & Tehri	MU	13,150
2	Bilateral purchase	MU	1,816
3	Total (1 + 2)	MU	14,965
4	Energy available at DTL periphery	MU	14,178
5	PGCIL Losses	MU	787
6	PGCIL Losses	%	5.26

3.35 The SLDC submitted that the external transmission losses have increased from 3.40% (FY06) to 5.26% (FY07) due to the following reasons:

(a) Decrease in UI sales and increase in purchase from the grid, leading to higher losses in FY07;

(b) Increase in transmission loss in the Northern Region from 3.4% in FY06 to 4.21% in FY07; and

(c) Increase in transmission loss in the other regions from 8.5% in FY06 to 9.5% in FY07.

3.36 Based on the submissions made by the SLDC, the Commission has considered the external transmission losses, applicable to DTL in FY07 as 787 MU (5.26 %).

Employee Expenses

3.37 In the Tariff Order for FY07, the Commission had approved the net employee expense for FY06 as Rs. 46.46 Cr and that for FY07 as Rs. 50.60 Cr. The Petitioner has now submitted actual net employee expense as Rs. 44.73 Cr in FY06 and Rs. 52.58 Cr in FY07, based on its audited accounts for the two years.

3.38 The Commission has separately analysed various components of employee expenses while truing-up the values for FY06 and FY07.

3.39 The Petitioner has submitted that salaries paid to DTL employees based on audited accounts of FY06 and FY07 were Rs. 26.06 Cr and Rs. 26.10 Cr respectively. The Commission verified the submission made by the Petitioner and approves the same.

3.40 The Petitioner submitted the Dearness Allowance (DA) paid in FY06 and FY07 as Rs. 5.04 Cr and Rs. 6.04 Cr respectively. The Commission noted the increase of 20% in DA from FY06 to FY07 and sought clarifications for the same. The Petitioner submitted that arrears of Rs. 0.18 Cr against DA in FY06 were paid in FY07, and hence, the net increase in DA in FY07 has been only 12.2%. The Commission has accepted the above justification for increase in DA and approved the same for true-up for FY06 and FY07.

3.41 The Petitioner has submitted other employee related costs incurred in FY06 and FY07 as Rs. 16.33 Cr and Rs. 18.41 Cr respectively. During analysis, the Commission noted that Rs. 35 lakhs and Rs. 39 lakhs in FY06 and FY07 respectively are provision for overtime. The Commission in its last Tariff Order had disallowed the provision for overtime while truing-up expenses for FY06 since it was a provision and not expenditure. The Commission has applied the same principle in this Tariff Order and disallowed the provision for overtime in FY06 and FY07. The Commission has therefore considered other employee costs as Rs. 15.98 Cr and Rs. 18.02 Cr respectively for truing-up in FY06 and FY07 respectively.

3.42 The Commission has trued-up the other components of employee expenses, such as the contribution to terminal benefits based on the audited accounts of the Petitioner.

3.43 The Petitioner submitted capitalisation of employee expenses in FY06 and FY07, based on audited accounts, as Rs. 8.13 Cr and Rs. 6.70 Cr respectively. The Commission has determined the capitalization of employee expenses in consultation with the Petitioner and prudence checks for allowed asset capitalisation, following which the capitalised employee expenses in FY06 and FY07 have been determined as Rs. 2.07 Cr and Rs. 5.93 Cr respectively.

3.44 Considering all the above, the Commission has approved net employee expenses for FY06 and FY07 as Rs. 50.44 Cr and Rs. 52.96 Cr respectively.

3.45 The summary of net employee expenses approved by the Commission for FY06 and FY07 is provided in the table below.

Table 11: Employee Expense of DTL for FY06 (Rs Cr.)

Particulars	Approved	Actuals	Trued-Up
Salaries	24.97	26.06	26.06
Additional Pay / Dearness Allowance (DA)	5.18	5.04	5.04
Other Costs	15.98	16.33	15.98
Terminal Benefits	5.86	5.43	5.43
Total	**51.99**	**52.86**	**52.51**
Less: Expenses capitalized	5.53	8.13	2.07
Net Employee Expenses	**46.46**	**44.73**	**50.44**

Table 12: Employee Expense of DTL for FY07 (Rs Cr.)

Particulars	Petition	Approved	Actuals	Trued-Up
Salaries	26.32	25.72	26.10	26.10
Additional Pay / Dearness Allowance (DA)	4.03	5.49	6.04	6.04
Other Costs	17.51	16.46	18.41	18.02
Terminal Benefits	5.89	6.04	8.74	8.74
Total	**53.75**	**53.71**	**59.28**	**58.89**
Less: Expenses capitalized	3.70	3.11	6.70	5.93
Net Employee Expenses	**50.05**	**50.60**	**52.58**	**52.96**

Repairs and Maintenance Expenses

3.46 The Petitioner has submitted the actual R&M expenses incurred in FY06 and FY07, based on its audited accounts as Rs. 18.75 Cr. and Rs. 19.92 Cr. respectively.

3.47 In the Tariff Order for FY07, the Commission had approved R&M expenses of Rs. 17.26 Cr. for FY06 based on provisional accounts, and Rs. 17.17 Cr. for FY07 based on estimates submitted by the Petitioner. The Commission has analysed each component of R&M expenses as submitted by the Petitioner and trued-up R&M expenses for FY06 and FY07 as Rs. 18.75 Cr. and Rs. 19.92 Cr. respectively.

Table 13: R&M Expenses of DTL (Rs Cr.)

Particulars	Approved	Actuals	True-Up
FY06	17.26	18.75	18.75
FY07	17.17	19.92	19.92

Administrative and General Expenses

3.48 The Petitioner has submitted the actual Administrative and General (A&G) expenses incurred in FY06 and FY07, based on its audited accounts as Rs. 12.21 Cr. and Rs. 15.30 Cr. respectively.

3.49 In the Tariff Order for FY07, the Commission had approved A&G expenses of Rs. 9.10 Cr. for FY06, based on the provisional accounts and Rs. 9.46 Cr. for FY07 based on estimates submitted by the Petitioner. The Commission has analysed each component of A&G expenses as submitted by the Petitioner and trued-up A&G expenses for FY06 and FY07 as Rs. 12.21 Cr. and Rs. 15.30 Cr. respectively.

3.50 The Petitioner submitted capitalisation of A&G expenses in FY06 and FY07, based on audited accounts, as Rs. 1.29 Cr. and Rs. 1.89 Cr. respectively. The Commission has determined the capitalization of A&G expenses in consultation with the Petitioner and prudence checks for allowed asset capitalisation, following which the capitalised A&G expenses in FY06 and FY07 have been determined as Rs. 2.07 Cr. and Rs. 5.93 Cr. respectively.

3.51 Considering all the above, the Commission has approved net A&G expenses for FY06 and FY07 as Rs. 10.14 Cr and Rs. 9.37 Cr respectively, as shown in the table below.

Table 14: A&G Expenses of DTL in FY06 (Rs Cr.)

Particulars	Approved	Actuals	True-Up
Gross A&G Expenses	9.10	12.21	12.21
Less: Expenses capitalised	0.00	1.29	2.07
Net A&G Expenses	9.10	10.92	10.14

Table 15: A&G Expenses of DTL in FY07 (Rs Cr.)

Particulars	Petition	Approved	Actuals	True-Up
Gross A&G Expenses	10.99	9.46	15.30	15.30

Less: Expenses capitalised	0.76	0.64	1.89	5.93
Net A&G Expenses	10.23	8.82	13.40	9.37

Capital Investment

3.52 The Petitioner submitted its capital investment in FY06 and FY07 as Rs. 106.06 Cr and Rs. 60.31 Cr respectively. It also submitted details of various schemes/ projects initiated in FY06 and FY07.

3.53 In the Tariff Order issued on September 22, 2006, the Commission had approved capital investment in FY06 as Rs. 75.28 Cr. The Commission had also approved capital investment in FY07 as Rs. 100 Cr. The approved capital investment for both years excluded Interest during Construction (IDC) and Establishment Expenses.

3.54 During analysis, the Commission noted a mismatch in the values of capital investment for FY07 as submitted in the petition and as contained in quarterly progress reports submitted to the Commission.

3.55 The Commission directed the Petitioner to clarify the reason for this mismatch, following which the Petitioner clarified in its letter No. F.DTL/203/F-10/2007-08/Opr.GM(Comml)/158 dated 01 October 2007, that it had made capital investment of Rs. 31.68 Cr in FY07, which does not include IDC and establishment expenses.

3.56 The Commission analyzed the details of the capital investment submitted by the Petitioner and approved investment of Rs. 75.28 Cr and Rs. 31.68 Cr for FY06 and FY07 respectively, excluding IDC and Establishment Expenses.

Table 16: Capital Investment of DTL for FY07 (Rs Cr.)

Particulars	Petition	Approved	Actuals	True-Up
Base Capital Investment	119.08	100.00	31.68	31.68

Asset Capitalization

3.57 The Commission had approved provisional capitalisation of Rs. 48.57 Cr. and Rs. 60.43 Cr. in FY06 and FY07 respectively, in the Tariff Order for FY07. The Petitioner has now submitted asset capitalisation of Rs. 125.63 Cr. and Rs. 80.50 Cr. in FY06 and FY07 respectively.

3.58 The Commission has analysed the philosophy of asset capitalization being followed by the Petitioner as reflected in their books of accounts/ financial records. It has been noted that the entire transmission scheme is being executed through various Work Orders issued for different elements of civil & electrical works. The capitalization is accordingly considered by the Petitioner on completion of respective Work Orders even though the scheme/asset as a whole is commissioned at a later date. During the technical sessions, the Petitioner has submitted that there is also a delay in submission of the Completion Reports by the various divisions within DTL; thereby the capitalization as reflected in the financial records is not reflective of the factual position. This certainly distorts the logical mechanism of capitalization for transmission assets.

3.59 The Commission is of the view that the transmission scheme comprising specified transmission lines, sub-stations with associated equipment and works as defined in the scope, needs to be considered for capitalization only on its commercial operation / charging to rated voltage level after obtaining the statutory clearance of Electrical Inspector etc. and compliance with the safety Rules /Regulations/Standards in vogue.

3.60 During analysis of the petition, the Commission directed the Petitioner to organize for scheme-wise completion and consequent capitalization 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. The Commission further directed that the relevant information be furnished in the formats separately prescribed by the Commission for capitalization of assets.

3.61 The Petitioner has subsequently submitted the details about capitalisation of assets in FY06 and FY07, in the formats prescribed by the Commission, on October 17, 2007 and October 31, 2007.

3.62 The Commission analysed the information submitted by the Petitioner and approved asset capitalisation of Rs. 83.97 Cr. in FY06 and Rs. 95.67 Cr. in FY07, based on the methodology elaborated above. The summary of opening balance of fixed assets, asset capitalisation during the year and closing balance for FY06 and FY07 is summarised in Table 22 and Table 23 respectively.

Reasonable Return

3.63 The Petitioner has estimated return based on the methodology adopted by the Commission in its previous tariff orders in accordance with the Sixth Schedule of Electricity Supply Act, 1948 @ 16% on net capital base. Based on this, the Petitioner has estimated the reasonable return of Rs. 34.62 Cr. for FY07. The Petitioner has not submitted the revised value of return for FY06 which would have changed due to changes in GFA and capitalisation. The Commission, however, would use its own methodology to true-up the return for FY06.

3.64 The Commission has continued with the same methodology for estimating the Capital Base and Reasonable Return for FY06 and FY07, as was adopted (i.e. as per Schedule VI of Electricity Supply Act) in the Tariff Order for FY07.

3.65 The summary of capital base and reasonable return as submitted by the Petitioner and as approved by the Commission is provided in table below:

Table 17: Capital Base and Reasonable Return (Rs Cr.)

Particulars	FY06		FY07		
	Approved	True-Up	Approved	Actuals	True-Up
Original cost of fixed assets (excl consumer contribution)	792.47	827.87	852.90	953.59	923.54
Cost of intangible assets	0.00	0.00	0.00	0.00	0.00
Original cost of WIP	161.99	127.17	201.55	146.09	86.86
Compulsory investments	0.00	0.00	0.00	0.00	0.00
Amount of working capital as sum of:					
Average cost of stores	8.00	8.00	8.00	11.89	11.89
Average cash & bank balance	34.97	34.97	35.00	88.16	13.70
Sub Total	**997.43**	**998.01**	**1097.45**	**1199.72**	**1035.99**
Amount written off or set aside on account of depreciation of fixed / intangible assets	268.86	269.48	296.80	387.12	299.25
Amount of loan from State Govt	252.77	265.13	334.00	341.25	277.48
Loan from Holding Company	270.00	270.00	255.00	255.00	255.00
Debenture issues/commercial loan	0.00	0.00	0.00	0.00	0.00
Amounts deposited in cash with licensee by consumer by way of security	0.00	0.00	0.00	0.00	0.00
Sub-total	**791.63**	**804.61**	**885.80**	**983.37**	**831.73**
Net Capital Base	205.80	193.40	211.65	216.35	204.26
16% Return on capital base	32.93	30.94	33.86	34.62	32.68
Return on borrowed funds	0.00	0.00	0.00	0.00	0.00
Total Reasonable Return	**32.93**	**30.94**	**33.86**	**34.62**	**32.68**

Interest and Finance Charges

3.66 In the Tariff Order of DTL for FY07, the Commission had approved interest and finance charges as Rs. 27.47 Cr. for FY06 (after first true-up) and Rs. 58.30 Cr. for FY07. The Petitioner has now submitted the interest and finance expenses incurred in FY06 and FY07 as Rs. 31.39 Cr. and Rs. 63.58 Cr. respectively. The Petitioner has also submitted the interest expenses paid on cash credit limits as Rs. 2.28 Cr. and Rs. 3.46 Cr. for FY06 and FY07 respectively.

3.67 The Commission has analysed details of the interest expenses submitted by DTL for both FY06 and FY07 and considered loans taken from DPCL and loans taken under the Plan Fund assistance from the GoNCTD for determination of interest costs. It has considered the debt requirements based on the approved capital investment of the Petitioner for FY06 and FY07.

3.68 The Commission has calculated the interest liability for FY06 and FY07, by considering the tenure of 15 years and interest rate of 11.5% on all new loans drawn by DTL from GoNCTD.

3.69 The following table contains details for the three categories of loans in the books of accounts of the Petitioner, as approved by the Commission, at the end of FY05.

Table 18: Approved Loan Details of DTL (FY05)

All values in Rs.Cr	Closing Balance	Interest Rate (%)	Repayment Type
DPCL	270.00	12.00%	Half Yearly
Loan from GoNCTD for Plan Assistance	28.71	13.00%	Yearly
Loan from GoNCTD for Plan Assistance*	175.45	11.50%	Yearly
Total	**474.17**		

** The Commission had approved 5 loans taken from GoNCTD Plan Funds having interest rate of 11.50% and gross closing value of Rs.175.45 Cr.*

3.70 The details for the various loans, based on the analysis of the Commission, is provided in the tables below:

Table 19: Approved Loan Details of DTL (FY06) (Rs Cr.)

Source	Opening Balance	Additions	Repayments	Closing Balance
DPCL	270.00	0.00	0.00	270.00
Loan from GoNCTD for Plan Assistance	204.17	75.28	14.31	265.13
Total	**474.17**	**75.28**	**14.31**	**535.13**

Table 20: Approved Loan Details of DTL (FY07) (Rs Cr.)

Source	Opening Balance	Additions	Repayments	Closing Balance
DPCL	270.00	0.00	15.00	255.00
Loan from GoNCTD for Plan Assistance	265.13	31.68	19.33	277.48
Total	**535.13**	**31.68**	**34.33**	**532.48**

3.71 The Commission has calculated the gross interest charges for FY06 and FY07 considering the loan details as above, and approves interest expenses of Rs. 27.52 Cr. and Rs. 56.87 Cr respectively in FY06 and FY07. The summary of interest and finance charges is provided in Table 21.

3.72 The Petitioner also submitted capitalisation of interest expenses for FY06 and FY07 as Rs. 12.83 Cr. and Rs. 15.09 Cr. respectively. The Commission has considered the capitalisation of interest expenses as a proportion of approved asset capitalisation.

3.73 In line with the above, the Commission has calculated the interest expenses capitalised during FY06 and FY07 as Rs. 5.96 Cr and Rs. 17.05 Cr respectively. Therefore, the net interest expenses approved by the Commission for FY06 and FY07 are Rs. 21.56 Cr. and Rs. 39.82 Cr. respectively.

3.74 The details of interest expenses, as trued-up by the Commission for FY06 and FY07 are given below.

Table 21: Interest and Finance Charges (Rs Cr.)

	FY06			FY07		
Particulars	**Approved**	**Petition**	**True Up**	**Approved**	**Petition**	**True Up**
Interest on Loan from DPCL	0.00	0.00	0.00	23.88	23.85	23.85
Interest on Loan under Plan Fund Assistance from GoNCTD	27.47	30.55	27.52	34.42	39.03	33.02
Interest on Cash Credits	0.00	2.28	0.00	0.00	3.46	0.00
Sub Total	**27.47**	**32.83**	**27.52**	**58.30**	**66.34**	**56.87**
Less: Interest Capitalised	8.49	12.83	5.96	6.39	15.09	17.05
Total	**18.98**	**20.00**	**21.56**	**51.91**	**51.24**	**39.82**

Depreciation

3.75 The Commission had approved depreciation of Rs. 26.09 Cr. during true-up of FY06 and Rs. 27.94 Cr. for FY07, in the Tariff Order issued on September 22, 2006. The Commission has now trued-up the depreciation applicable for FY06 and FY07, based on approved levels of asset capitalisation, as determined above.

3.76 The Commission has determined the depreciation for FY06 and FY07 considering the average value of GFA in the respective year and the average depreciation rate of 3.40% as followed by the Commission in its previous orders.

3.77 The details regarding calculation of depreciation for the two years is shown below.

Table 22: Determination of Depreciation in FY06 (Rs Cr.)

Particulars	Approved	Actuals	True-Up
Opening Balance of GFA	743.90	807.19	743.90
Addition of assets during the year	48.57	101.23	83.97
Retirement of assets during the year	0.00	20.66	0.00
Closing Balance of GFA	792.47	887.76	827.87
Average GFA	768.19	847.47	785.88
Rate of depreciation	3.40%	3.40%	3.40%
Depreciation	**26.09**	**30.07**	**26.72**
Accumulated Deprecation (Cl Bal)	**268.85**	**339.38**	**269.48**

Table 23: Determination of Depreciation in FY07 (Rs Cr.)

Particulars	Petition	Approved	Actuals	True-Up
Opening Balance of GFA	945.05	792.47	887.76	827.87
Addition of assets during the year	80.59	60.43	67.61	95.67
Retirement of assets during the year	0.00	0.00	1.78	0.00
Closing Balance of GFA	1025.64	852.90	953.59	923.54
Average GFA	985.35	822.69	920.67	875.70
Rate of depreciation	3.60%	3.40%	3.55%	3.40%
Depreciation	**35.44**	**27.94**	**32.70**	**29.77**
Accumulated Depreciation (Cl Bal)	**308.47**	**296.79**	**372.08**	**299.25**

3.78 Based on the true-up of asset capitalisation, the Commission has determined depreciation for FY06 as Rs. 26.72 Cr. and for FY07 as Rs. 29.77 Cr.

Means of Finance

3.79 The Petitioner has funded its capital investment through loans taken from the Plan Funds of GoNCTD. It has taken new loans worth Rs. 90.00 Cr in FY06 and Rs. 60.00 Cr in FY07 from these Plan Funds.

3.80 The Commission has trued-up interest payments considering the approved amount of capital investment in each of these years, i.e. Rs. 75.28 Cr in FY06 and Rs. 31.68 Cr in FY07 through loans taken from GoNCTD.

Transition Loan Support

3.81 At the start of the Policy Direction period, the GoNCTD provided a transition loan support of Rs. 3452 Cr. during the period FY03 – FY07 as a loan to DTL to bridge the gap between its revenue requirement and the bulk supply price received from the distribution licensees.

3.82 The table below shows the transition period support committed for the policy direction period (FY03 – FY07) in form of loan as provided in the Financial Restructuring Plan approved by the GoNCTD.

Table 24: Transition Period Support (Rs Cr.)

Particulars	FY03	FY04	FY05	FY06	FY07	Total
Loan Amount	1364	1260	690	138	0	**3452**

3.83 The Commission had considered the matter of the transition loan provided by GoNCTD and expressed its views in the Tariff Order for DTL issued on July 7, 2005, which are as extracted below:

"In respect of the repayment of loan of Rs 3452 provided by GNCTD for meeting revenue gap, the Policy Direction stipulates that this loan is to be repaid by the TRANSCO to GNCTD in the manner agreed to between Transmission Company and the GNCTD. The TRANSCO has submitted that it has not considered any interest charge on the loans availed from GNCTD for meeting the revenue gap as per the Policy Directions issued by GNCTD as the detailed terms and conditions of this loan including the rate of interest are not finalised. The Commission is of the opinion that if at any point of time, the servicing of this loan is to be considered as pass through in the ARR of the TRANSCO, the revenue gap of TRANSCO will increase substantially, which in turn will result in tariff shock to the consumers. Thus, it will be difficult at any stage to service this loan of Rs 3450 Crore through the ARR of the Transmission Company. Therefore, the TRANSCO shall take up this matter of servicing (principal repayments and interest payments) of loan of Rs 3450 with the Appropriate Authority and make arrangements for servicing this loan without affecting the ARR of TRANSCO in the future years."

3.84 The GoNCTD conveyed its decision to convert this transition support loan into an interest free loan with a repayment period of 15 years through a letter dated May 24, 2006.

3.85 The Commission in the previous Tariff Order for the Petitioner issued on September 22, 2006 had not considered repayment of this loan as part of the ARR, and had stated the following:

"*With regard to the repayment of the principal, the Petitioner has not considered the same in the ARR. The Commission is of the opinion that in case the repayment of this loan is to be considered in the ARR of the Petitioner, the overall sectoral revenue gap may increase substantially, which in turn will result in additional tariff burden to the consumers. Thus, it will be difficult at any stage to service this outstanding loan through the ARR of TRANSCO. The Commission has been expressing this view since its Order dated June 26, 2003. Hence, the Commission is of the considered view that the burden of the entire transitional loan support to TRANSCO can not be passed on to the consumers and that the Government of GNCTD may consider converting this loan in to a grant. The Commission has also conveyed this view to the GNCTD as a statutory advice u/s 86(2) of the EA 2003 vide letter no F.3(131)/Tariff/DERC/2006-07/1341 dated July 7, 2006.*"

3.86 Further, the GoNCTD, vide letter no. F11 (28)/2005-Power-PE-1/1517 dated July 4, 2007 conveyed the Cabinet's decision to the Petitioner regarding conversion of the transition support loan into equity. Relevant extracts of the letter are as follows.

"Considering all the aspects and the fact that DTL will become a purely wires company w.e.f 1st April 2007 and is not in the position to service the power sector reform loan because of its complete transformation, there appears to be no option but to convert the existing loan into equity in favour of DTL."

"This equity will be reflected in the balance sheet of DTL in the financial year 2007-08 as policy directions vide which Rs. 3452 Cr loan has been extended and the policy direction is protected under the Electricity Act, 2003 till 31st March 2007."

3.87 Thus, the entire amount of the transition loan has been converted into equity by the GoNCTD and would reflect as Government's equity in the Petitioner's books of accounts from FY08.

3.88 The Petitioner has also submitted in its Business Plan that:

"As per the communication received from the GNCTD, Department of Power vide letter no. F.11(28)/2005-Power-EE1/1517 dated 04.07.07 the said loan of Rs. 3452 crore has been converted into Equity Share Capital of the company. As the purpose of sanctioning the said power return loan was to bridge the gap between the cost of power and the amount realized through Bulk Supply Tariff, the said loan has not been treated for the purpose of creation of future assets during control period. Therefore, in terms of the provisions of the MYT Regulations, the Return on Capital Employed (ROCE) has not been computed and projected on equity base of Rs. 3452 crore in the calculation of ARR. Further, the said equity capital has not been considered a part of proposed capital structure (70:30) in Control Period."

3.89 In view of the above, the Commission has not considered any return on equity or RoCE (during the Control Period) on this amount of Rs. 3452 Cr., as it is not utilized in creation of assets.

Tax Expenses

3.90 The Commission in the previous Tariff Order had considered the amount of Rs. 0.32 Cr. towards Fringe Benefit Tax (FBT) for the FY06 based on the provisional accounts of DTL. The Commission had not considered any liability on account of Fringe Benefit Tax for FY07 as the same was not proposed by the Petitioner. The Commission had also not considered any payment for corporate income tax for FY06 and FY07, in line with the submissions of the Petitioner.

3.91 The Commission had stated that FBT would be considered at the time of true-up based on audited accounts. Hence, the Commission has approved FBT as Rs. 0.46 Cr for FY06 and Rs. 0.47 Cr. for FY07.

3.92 Based on the audited accounts of the Petitioner, the Commission has approved an amount of Rs. 5.15 Cr. as income tax for FY07. The Petitioner has no liability on account of income tax in FY06 and the same has been considered by the Commission while truing up for FY06.

Rebate on Sale of Power

3.93 In the Tariff Order for DTL issued on September 22, 2006, the Commission had approved the rebate on sale of power for FY06 and FY07 as Rs. 33.53 Cr. and Rs. 33.00 Cr. respectively, based on submissions of the Petitioner.

3.94 The Commission has trued-up the rebate amount for FY07 based on audited accounts, and thereby approved an amount of Rs. 40.89 Cr. for FY07.

Table 25: Rebate on Sale of Power (Rs Cr.)

Year	Approved	Actuals	True-Up
Rebate for FY06	33.53	33.53	33.53
Rebate for FY07	33.00	40.89	40.89

Total Expenditure

3.95 The table given below provides a summary view of the various expenses as approved by the Commission for the purpose of truing of expenses for FY06 and FY07. Detailed analysis of each expense head has already been provided in above sections.

Table 26: Total Expenditure (Rs Cr.)

Particulars	FY06		FY07		
	Approved	True-Up	Approved	Revised Estimates	True-Up
Power Purchase Expenses	4842.95	4842.95	4866.65	6391.93	5600.37.

Adjustment on account of refund from CPSUs	(60.00)	(60.00)	(210.00)	(260.45)	(260.45)
Excess RLDC & ULDC allowed	0.00	0.00	(3.45)	0.00	(3.45)
Employee Expenses	46.46	50.44	50.60	52.58	52.96
A&G Expenses	9.10	10.14	8.82	13.40	9.37
R&M Expenses	17.26	18.75	17.17	19.92	19.92
Depreciation	26.09	26.72	27.94	32.71	29.77
Interest and Finance Charges	18.98	21.56	51.91	51.94	39.82
Rebate on Sale/Wheeling of Power to Discoms	33.53	33.53	33.00	40.89	40.89
Total Expenditure	**4934.36**	**4944.09**	**4842.64**	**6342.92**	**5529.19**
Contribution to contingency reserves	0.00	0.00	0.00	5.56	(5.48)
Income Tax & FBT	0.32	0.46	0.00	5.62	5.62
Net expenditure including special appropriations	**4934.68**	**4944.55**	**4842.64**	**6354.10**	**5529.34**

Treatment of Contingency Reserve

3.96 The contingency reserve created upto FY05 (Rs. 5.48 Cr.) exists in the accounts of the Petitioner. The Commission has adjusted the same in the true-up for FY07. In view of this, the Petitioner would not have any contingency reserve in its books of accounts.

Non Tariff Income (NTI)

3.97 The Commission had approved Non-Tariff Income for both FY06 and FY07 as Rs. 102.57 Cr. The Petitioner has submitted details of its non-tariff income based on the audited accounts as Rs. 96.77 Cr in FY06 and Rs. 172.33 Cr in FY07.

3.98 On analysis, the Commission noted that the non-tariff income in FY07 has undergone a significant increase due to the rebate obtained by the Petitioner on account of power purchase. The details of Non-Tariff Income as trued-up by the Commission for FY06 and FY07 are as follows:

Table 27: Non-Tariff Income (Rs Cr.)

Year	Approved	Actuals	True-Up
FY06	102.57	96.77	96.77
FY07	102.57	172.33	172.33

Treatment of DVB Arrears

3.99 The Commission in previous Tariff Orders has considered receivables of Rs. 429 Cr. against DVB arrears as revenues towards DTL.

3.100 The Petitioner submitted to the Commission that it has not received any arrears from DPCL or any other source. It requested the Commission to adjust the amount of Rs. 429 Cr. during true-up for FY07. In addition the Petitioner submitted that since it was not in the business of supply of power, the said amount should not be treated as revenue for DTL.

3.101 The Commission in its previous Tariff Orders has discussed the issue of treatment of DVB arrears and has presented its view on the same in each of these orders. The Commission reiterates its stand on treatment of DVB arrears below.

3.102 The Transfer Scheme, notified by the Government of NCT of Delhi on November 20, 2001, stated: *"All the receivables from sale of power to consumers of the erstwhile Board other than to the extent specifically included in Schedules D, E and F shall be to the account of Holding Company. The DISCOMs will be authorised to realise the receivables of the Holding Company in their respective area of supply. Upon realisation of such receivables of the Holding Company the same shall be shared between the Holding Company and the DISCOMs in the ratio 80:20".*

3.103 The Commission in its Tariff Order for FY04 issued on June 26, 2003 had stated that: "*the amount corresponding to 80% of realized DVB arrears would have been available in the sector to reduce the overall gap, had DVB continued to be in existence. This outflow of money from the sector due to the above said provision is not intended and thus to avoid the burden of this amount to be passed on in tariff, the Commission has requested the Government to revisit the said provision…….Accordingly, for FY04, the Commission has considered 80% of the DVB arrears collected as a payment to the TRANSCO, rather than the Holding Company. The Commission has assumed that these funds will be transferred to the TRANSCO and these funds are available to the sector. Accordingly the Commission has considered 80% of the DVB arrears for FY03 and FY04 as funds available to TRANSCO in FY04."*

3.104 Subsequently, on the request of the Commission, GoNCTD issued a clarification, vide letter No. F.11(99)/2001-Power/531 dated March 31, 2004 stating that the original Transfer Scheme remains valid and the receivables against DVB arrears would be shared between the Holding Company and the DISCOMs in the ratio 80:20.

3.105 Following this clarification, the Commission in its Tariff Order for FY05 issued on June 9, 2004 stated that: *"it would be equitable and fair if the revenue realised on account of recovery remain in the sector and as recommended in the Tariff Order dated June 26, 2003, are passed on to the DTL instead of the Holding Company. Accordingly, the Commission vide its letter dated 25th April 2004 had again requested the Government to reconsider its decision………The Commission is of the opinion that it will not be fair at all to pass on the burden of the past receivables of the sector to the consumers of Delhi as also this will warrant huge tariff shock to consumers ."*

3.106 Accordingly, the Commission considered 80% of the collected arrears remaining within the sector as revenue to TRANSCO while estimating the ARR and revenue gap of DTL for FY05.

3.107 The Petitioner raised the issue of DVB arrears in the review petition filed on July 22, 2004. The Commission issued the Order on this review petition on October 29, 2004 wherein it did not admit the issue of remittance of DVB Arrears to the Holding Company instead of the TRANSCO and maintained that the remittance of DVB arrears would be treated as revenue to DTL.

3.108 Subsequently, in the Tariff Order of DTL for FY06 issued on July 7, 2005 the Commission stated that: *"This issue has been further examined by the Commission in light of Policy Directions regarding treatment of efficiency gains with respect to over achievement and under achievement of AT&C loss reduction during the period FY 2002-03 to FY 2006-07. According to the arrangement as stipulated in the Policy Directions, the benefits of overachievement by the DISCOMs in AT&C losses which is calculated by taking into account the past DVB arrears has to be passed on to consumers fully if the AT&C loss reduction is upto minimum level and if the AT&C loss level reduction is beyond the minimum level, revenue realised on account of AT&C loss reduction between the Minimum level and actual level has to be equally shared between the consumers and the Licensees. The additional revenue to be passed on to consumers due to over-achievement has to be taken into account for the purpose of determination of ARR for next year. In case, the DVB arrears are passed on to the Holding Company, the arrangement proposed for treatment of over achievement of efficiency targets in the Policy Direction is not implementable. Therefore, the Commission while estimating the ARR and Revenue Gap for FY 2005-06 has considered 80% of the collected DVB arrears remaining within the sector as revenue to TRANSCO, in line with the practice followed in previous years."*

3.109 Consequent to the issue of the tariff order for FY06 neither was any communication received on this issue, nor was a modification made to the Transfer Scheme. The Commission observes that the last communication from GoNCTD in this regard was issued on August 12, 2004.

3.110 The Commission had also issued an order on November 23, 2005 regarding the Late Payment Surcharge (LPSC) waiver scheme. The Commission approved the proposal received from DPCL and the Distribution Companies as an exceptional case and a one-time measure subject to the following conditions:

(a) The entire amount recovered through this scheme, be it of Government connections or otherwise, shall flow back to the sector and shall account as revenue during the year of collection and shall be considered for the determination of Tariff as per the methodology followed by the Commission in its various Tariff Orders;

(b) The Licensees shall keep separate accounts of the principal amount of arrears of the consumers upto the DVB period and the LPSC accumulated till date on such arrears. The Licensees will also maintain accounts of principal amount, which has accumulated w.e.f. 01.07.2002 and LPSC leviable on the same till date.

(c) The Commission directs that whatever money is collected out of this scheme should be independently accounted and should also be closely monitored by the Discoms with regard to progress of collection.

(d) The Discoms have suggested that payments in excess of Rs. 4000/- may also be accepted in cash, as the directive in the Tariff Order is against a particular bill, whereas the arrears relate to more than one bill period. During discussion, the Discoms indicated that if payments by cash is allowed, it may help in higher collections. The Commission took note of the submission and considers that if it can help to generate additional revenues, it can be accepted as a one-time measure.

3.111 The Commission still maintains its view that the arrears recovered should not be pulled out of the sector as this would lead to an increase in the overall sector gap and could lead to significant tariff shocks to consumers of Delhi. Therefore, the Commission continued the practise of considering the collected DVB arrears by DPCL as the revenue to DTL.

3.112 The Commission in the previous tariff orders has approved the following amount as the revenue to DTL from DVB arrears.

Table 28: Approved Levels of DVB Arrears as Revenue to DTL (Rs Cr.)

Particulars	Amount
Arrears for FY03 & FY04 treated as revenue for FY04	210
Arrears for FY05 & FY06 treated as revenue for FY06	119
Arrears directly paid to DPCL by Govt. in FY06	100
Total	**429**

3.113 During analysis of the current petition, the Commission directed the Discoms to submit details of actual DVB arrears collected and the amounts payable to DPCL in each year in the period FY03 to FY07. The Discoms submitted the following details in response to the query of the Commission:

Table 29: Receivables of DPCL on account of DVB Arrears (Rs Cr.)

Particulars	FY03	FY04	FY05	FY06	FY07
Arrears	107.00	103.87	55.78	52.86	18.14

Government arrears directly paid to DPCL	0.00	0.00	0.00	99.99	200.02
Total	**107.00**	**103.87**	**55.78**	**152.85**	**218.16**

3.114 The Commission had approved DVB arrears of Rs. 119 Cr (arrears payable by the Discoms to DPCL for the period FY05 & FY06) and Rs. 100 Cr (arrears paid directly to DPCL in FY06) as revenue to DTL, based on the provisional estimates while truing up the expenses for FY06 in the Tariff Order for FY07.

3.115 The Petitioner has appealed to the Honourable Appellate Tribunal for Electricity (ATE) against the Commission's treatment of DVB arrears as revenue to DTL. Since the matter is sub judice, the Commission has maintained its previous treatment of DVB arrears, and hence not accepted the Petitioner's request to pass on the past DVB arrears of Rs. 429 Cr as an expense in the ARR for FY07.

3.116 Further, based on the information submitted by the Discoms, the Commission has considered actual DVB arrears of Rs. 319.51 Cr (arrears payable by the Discoms to DPCL from FY03 to FY06) and Rs. 99.99 Cr (arrears paid directly to DPCL in FY06) as revenue to DTL for FY06.

3.117 In addition, the Commission has considered the amount of Rs. 18.14 Cr (arrears payable by the Discoms to DPCL for the period FY07) and Rs. 200.02 Cr (arrears paid directly to DPCL in FY06) as revenue to DTL for FY07.

3.118 Considering the above values for the receivables on account of DVB arrears, the total income to the Petitioner for the period FY03 – FY07 is found to be Rs. 637.66 Cr as shown below.

Table 30: Receivables of DTL on account of DVB Arrears (Rs Cr.)

Particulars	Amount
Arrears payable by Discoms to DPCL (FY03–FY06)	319.51
Arrears directly paid to DPCL by Govt. (FY03-FY06)	99.99
Arrears payable by Discoms to DPCL (FY07)	18.14
Arrears paid to DPCL by Govt. (FY07)	200.02
Total	**637.66**

Annual Revenue Requirement

3.119 The Commission has calculated the net revenue requirement of the Petitioner for FY 06 and FY07 using the same approach followed in the Tariff Order for FY07. The Commission has also considered revenue realized, subsidies received and the Government support received by the Petitioner for the purpose of true-up.

3.120 The revenue requirement and revenue gap/ surplus of the Petitioner for FY06 after true-up are detailed in the table below.

Table 31: Revenue Requirement and Revenue Surplus/ Gap for FY06 (Rs Cr.)

Particulars	True-Up (FY07 Order)	True-Up (Final)
Expenses	4934.68	4944.55
Return	32.93	30.94
Less: Non-tariff income	(102.57)	(96.77)
Net Requirement	**4865.04**	**4878.73**
DVB arrears (for FY05 and FY06)	(119.00)	(108.64)
Govt. Support	(138.00)	(138.00)
Amortisation of Regulatory Assets	0.00	0.00
DVB arrears paid directly to DPCL	(100.00)	(99.99)
Revenue Requirement	**4508.04**	**4532.10**
Revenue from Tariffs & Charges	4366.35	4366.35
Surplus/ (Deficit)	**(141.69)**	**(165.75)**

3.121 The revenue requirement and revenue gap/ surplus of the Petitioner for FY07 after true-up of all the expenses are provided in the table given below.

Table 32: Revenue Requirement and Revenue Surplus/ Gap for FY07 (Rs Cr.)

Particulars	Approved	Revised Estimates	True-Up
Expenses	4842.64	6354.10	5529.34
Return	34.00	34.62	32.68
Less: Non-tariff income	(102.57)	(172.33)	(172.33)
Net Requirement	**4774.07**	**6216.38**	**5389.68**
DVB Arrears		429	(218.16)
Truing up for FY05	(87.11)		(87.11)
Truing up for FY06	141.69		165.75
Incentives against CPSUs dues			(667.82)
Revenue Requirement	**4828.65**	**6645.38**	**4582.35**
Revenue from Tariffs & Charges	4873.96	5562.00	4778.51
Surplus/ (Deficit)	**45.31**	**(1083.38)**	**196.17**

Treatment of Revenue Surplus of FY07

3.122 The Petitioner has a net surplus of Rs. 196.17 Cr in FY07 after considering truing up of all the expenses for FY06 and FY07. This surplus is considered as payable by the Petitioner to the Discoms in proportion of the energy purchased by the respective Discoms from DTL during FY07. While truing up of expenses of all Discoms for FY07, this would be considered as a receivable from DTL in the said proportion. The summary of the same is provided in the table below.

Table 33: Transfer of Surplus Amount of DTL in FY07 to Discoms

Particulars	Energy Sales		FY07
	MU	%	Rs Cr.
BRPL	9122	41.90	82.20
BYPL	5298	24.34	47.74
NDPL	5986	27.50	53.94
NDMC	1178	5.41	10.61
MES	186	0.85	1.67
Total	**21769**	**100.00**	**196.17**

A4: ANALYSIS OF AGGREGATE REVENUE REQUIREMENT (ARR) FOR THE CONTROL PERIOD

Introduction

4.1 The Commission has analysed the Multi Year Tariff (MYT) petition submitted by DTL for approval of Aggregate Revenue Requirement and determination of Transmission Service Charge for the Control Period (FY08-FY11).

4.2 The Commission held technical discussions to validate the data submitted by the Petitioner and sought further clarifications on various issues. The Commission has considered all information submitted by the Petitioner as part of the tariff petition, audited accounts for FY07, responses to various queries raised during the discussions and also during the public hearing, for determination of tariff.

4.3 A brief snapshot of the MYT petition, submitted by the Petitioner for the Control Period is shown in the table below:

Table 34: Summary of MYT Petition (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Total Expenditure	**184.08**	**189.23**	**154.52**	**317.88**
Return on Capital Employed	118.82	137.91	238.98	361.96
Aggregate Revenue Requirement	**302.90**	**327.13**	**393.50**	**679.84**
Revenue from Tariff & Charges	293.48	315.95	381.75	667.19
Other Revenue	9.36	10.45	10.78	11.71
Total Revenue	**302.84**	**326.40**	**392.52**	**678.91**
Revenue Surplus/ (Deficit)	**(0.06)**	**(0.73)**	**(0.98)**	**(0.93)**

4.4 This chapter contains detailed analysis of the petition submitted by DTL and the various parameters approved by the Commission for determination of Transmission Service Charge for DTL.

Base Year

4.5 The Petitioner has considered the financial year FY06 as the base year for projecting values of certain cost elements for the Control Period. The Commission has considered the base year as FY07, in line with the provisions of the MYT Regulations. This is also relevant in view of availability of audited accounts of the Petitioner, which can therefore be relied upon as baseline values.

4.6 The Commission has considered the trued-up values of expenses for FY07 for projections during the Control Period.

Determination of Aggregate Revenue Requirement

4.7 The Commission analyzed all the components of the Aggregate Revenue Requirement (ARR) submitted by the Petitioner to approve suitable values for each component, for each year of the Control Period. As per the MYT Regulations, the ARR 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

4.8 The Petitioner submitted individual projections of its Employee Expenses, Repairs and Maintenance (R&M) Expenses and Administrative and General (A&G) Expenses to arrive at the O&M expenses for the Control Period.

4.9 The Petitioner has submitted the total Operations and Maintenance (O&M) Expenses for the base year (FY07) as Rs. 94.50 Cr. and projected the values for the four years of the Control Period as Rs. 137.79 Cr., Rs. 151.16 Cr., Rs. 164.68 Cr. and Rs. 212.11 Cr. respectively.

4.10 The Commission notes that the Petitioner has deviated from the approach proposed in the MYT regulation, for determination of employee expenses and A&G expenses for the Control Period. In view of the above, the Commission decided to determine the applicable O&M expenses for each year of the Control Period de novo.

4.11 As per the MYT Regulations for determination of transmission tariff, employee and A&G expenses for the Control Period are expected to be determined using the following methodology:

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

4.12 The inflation factor for the n^{th} year ($INDX_n$) is determined using a combination of Consumer Price Index (CPI) and Wholesale Price Index (WPI) for the n^{th} year as shown below:

$$INDX_n = 0.55*CPI_n + 0.45*WPI_n$$

Determination of Inflation Factor

4.13 The Inflation Factor used for indexing the O&M expenses are determined using a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI), which are expected to contribute to the employee costs and the A&G expenses respectively.

4.14 Since, the CPI component is primarily considered to contribute towards employee expenses; the Commission has considered the CPI (overall) for Industrial Workers published by the Labour Bureau. The WPI component is linked to A&G costs and hence has been taken from the WPI (overall) published by the Central Statistical Organisation.

Table 35: Actual CPI and WPI

Year	CPI (Overall)	% Growth YoY	WPI (Overall)	% Growth YoY
2000-01	444.17		155.59	
2001-02	463.33	4.3%	161.34	3.7%
2002-03	481.75	4.0%	166.85	3.4%
2003-04	500.33	3.9%	175.90	5.4%
2004-05	519.50	3.8%	187.23	6.4%
2005-06	540.00	3.9%	195.60	4.5%

4.15 Based on these values, the Commission has calculated the annual growth in values of CPI (overall) for Industrial Workers and WPI (overall) for the period FY01 – FY06 and has considered the same for determination of indices during the Control Period. The summary of the same is provided in the tables below.

Table 36: Projected CPI and WPI during the Control Period

Year	Projected Growth in CPI	CPI (Overall)	Projected Growth in WPI	WPI (Overall)
2006-07	4.0%	568.54	4.7%	209.75
2007-08	4.0%	591.19	4.7%	219.59
2008-09	4.0%	614.75	4.7%	229.88
2009-10	4.0%	639.25	4.7%	240.66
2010-11	4.0%	664.72	4.7%	251.95

4.16 The Commission has determined the inflation factor for the n^{th} 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 ($INDX_n$/ $INDX_{n-1}$) which is used for projections of employee and A&G expenses in each year of the Control Period, as shown in the table below.

Table 37: Escalation Factor for the Control Period

Year	Index (Consolidated)	Escalation Factor
2006-07	407.08	
2007-08	423.97	1.0415
2008-09	441.56	1.0415
2009-10	459.88	1.0415
2010-11	478.97	1.0415

Employee Expenses

Petitioner's Submission

4.17 The Petitioner has submitted gross employee expenses as Rs. 90.92 Cr., Rs. 95.68 Cr., Rs. 108.53 Cr. and Rs. 118.99 Cr. for FY08, FY09, FY10, and FY11 respectively.

4.18 The Petitioner has considered employee expenses of Rs. 59.28 Cr. as per the audited accounts of FY07 as baselines values for the Control Period. It has considered an escalation of 40% in total employee expenses on account of the likely impact of the recommendations of the 6th Pay Commission, thus arriving at the adjusted baseline value of Rs. 82.98 Cr.

4.19 The Petitioner has proposed its total employee costs for the Control Period, based on escalations of various components of the adjusted baseline employee expenses. The annual rates of increase for various components of employee expenses are as given below.

(a) Salaries – 3%

(b) Dearness Allowance (DA) – 6%

(c) Other Allowances – 4%

(d) Honorarium/ Overtime – 5%

(e) Statutory bonus/ Ex-gratia payments – 3%

(f) Contribution to terminal benefits – 10%

(g) Other Costs – 10%.

4.20 The summary of proposed employee expenses of the Petitioner for the Control Period is given in the table below.

Table 38: Proposed Employee Expenses Cost for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Employee Cost				
Salaries	39.01	40.18	44.70	48.01
Additional Pay / Dearness Allowance (DA)	9.72	10.31	11.74	12.94
Other Allowances & Relief	14.08	14.64	16.41	17.78
Interim Relief/ Wage Revision	-	-	-	-
Honorarium/Overtime	5.81	6.10	6.90	7.55
Statutory bonus/ Ex-gratia	0.54	0.56	0.62	0.67
Sub Total	**69.16**	**71.78**	**80.38**	**86.95**
Other Cost	7.80	8.53	10.03	11.40
Contribution to Terminal Benefits	13.96	15.36	18.12	20.65
Total	**90.92**	**95.68**	**108.53**	**118.99**

Commission's Analysis

4.21 The Commission has determined employee expenses of DTL for the Control Period using the methodology detailed above, in line with the specifications in the MYT Regulations. Hence, the employee cost for the n^{th} year of the Control Period (EMP_n) shall be determined using the employee cost for the $(n-1)^{th}$ year (EMP_{n-1}) and the escalation factor as determined above.

4.22 The Commission noted that the Petitioner has segregated employee expenses of FY07 between the SLDC and transmission business, but did not consider the same in calculating the baseline values for the Control Period.

4.23 As part of true-up for FY07, the Commission approved arrears of Rs. 0.18 Cr. for Dearness Allowance of FY06, which was paid in FY07. The Commission is of the view that since this amount is a part of the employee expenses of FY06, it should not be considered as part of the employee expenses for FY07, for calculation of base value for the Control Period.

4.24 Hence, the Commission has calculated the base employee expense after deducting the employee expenses of the SLDC in FY07, which has been determined as Rs. 4.76 Cr. and the impact of DA (Rs. 0.18 Cr.) from the approved employee expenses of FY07. Hence, the value of base employee expenses for the transmission business of the Petitioner is found to be Rs. 53.95 Cr. (Rs. 58.89 Cr. – Rs. 4.76 Cr. – Rs. 0.18 Cr.).

4.25 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.

4.26 Based on this, the Commission has calculated the revised employee costs for FY06 and FY07 and the arrears arising out of it. As discussed above, the Commission has also reduced the employee expense attributable towards SLDC in FY06 and FY07 while calculating the revised employee costs, as all the arrears related to employee expenses of SLDC in FY06 and FY07 has to be adjusted in the ARR of SLDC and not in the Transmission business of DTL.

4.27 Since the arrears on account of revision of employee costs are expected to be paid only in FY09, the Commission has considered the payment of arrears in tariff of FY09. Similarly, the increase in salaries has been considered for each year, but the impact of such increase has only been taken from FY09 onwards. The Commission shall true-up the impact on account of 6th Pay Commission recommendations based on the actual impact of the same.

4.28 The summary of the revised employee expenses considering the effect of 6th Pay Commission recommendations is provided below.

Table 39: Revised Employee Expenses for FY06 and FY07 (Rs Cr.)

Particulars	FY06	FY07
Employee Cost Approved in True up	52.51	58.89
Less: Allocation to SLDC (submitted by DTL)	(4.39)	(4.76)
Adjustment of DA Arrears of FY06 paid in FY07	0.18	(0.18)
Net Employee Cost	**48.31**	**53.95**
10% escalation due to Pay Commission recommendations	1.21	5.40
Revised Employee Cost	**49.51**	**59.35**

4.29 For the calculation of the employee cost for the Control Period the Commission has considered the following:

(a) Revised employee cost for the base year has been escalated as per the escalation factors mentioned in Table 37.

(b) All arrears due to the impact of the 6th Pay Commission recommendations would be payable in FY09.

4.30 The approved employee expenses of the Petitioner for each year of the Control Period are as shown below.

Table 40: Approved Employee Expenses for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Index(n)/ Index (n-1)	1.0415	1.0415	1.0415	1.0415
Employee Cost	**56.19**	**64.37**	**67.04**	**69.83**
Arrears		12.22		
Total Employee Cost	**56.19**	**76.59**	**67.04**	**69.83**

4.31 The capitalisation of employee expenses has been discussed later in the order in the section "Capitalisation of Expenses and Interest charges".

Administrative and General Expenses

Petitioner's Submission

4.32 The Petitioner has submitted the Administrative and General (A&G) Expenses as Rs. 15.91 Cr., Rs. 16.54 Cr., Rs. 17.20 Cr. and Rs. 17.89 Cr. for FY08, FY09, FY10 and FY11 respectively. The Petitioner has projected the A&G Expenses for the Control Period by escalating the different components of A&G Expenses of the base year/ preceding year with the annual escalation rates between 4 to 5 %.

4.33 The summary of proposed A&G Expenses of the Petitioner during the Control Period is given in the table below.

Table 41: Proposed A&G Expenses for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Total A&G Expenses	15.91	16.54	17.20	17.89
Less: Expenses capitalised	0.00	0.00	0.00	0.00
Net A&G Expenses	**15.91**	**16.54**	**17.20**	**17.89**

Commission's Analysis

4.34 The Commission notes that the Petitioner has not projected its A&G Expenses in line with the methodology proposed in the MYT Transmission Regulations. Hence, as discussed above, the Commission has determined the A&G Expenses for the Control Period using the same methodology as specified in the regulations.

4.35 In addition the Commission noticed that the Petitioner has not made any adjustments for the A&G Expenses of the SLDC in FY07 for making projections of A&G Expenses for the Control Period. The Petitioner subsequently segregated its A&G Expenses in FY07 between the SLDC and transmission functions as Rs. 1.00 Cr. and Rs. 14.30 Cr. respectively. However, no modification has been made to the projected A&G Expenses for the Control Period.

4.36 The Commission has calculated A&G expenses for the Control Period by considering the revised A&G Expenses of the base year and has escalated the same as per the escalation factor mentioned in Table 37. The summary of A&G Expenses as approved by the Commission is given in the table below.

Table 42: Approved A&G Expenses for the Control Period (Rs Cr.)

Particulars	Base Year	FY08	FY09	FY10	FY11
Index(n)/ Index (n-1)		1.0415	1.0415	1.0415	1.0415
Total A&G Expenses	**14.30**	**14.89**	**15.51**	**16.15**	**16.82**

4.37 The capitalisation of A&G Expenses has been discussed later in the order in the section "Capitalisation of Expenses and Interest charges".

Repairs and Maintenance Expenses

4.38 As per the MYT regulation for Transmission, the Repairs and Maintenance (R&M) Expenses of the Petitioner for the Control Period has 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 n^{th} year.

Petitioner's Submission

4.39 The Petitioner has determined the value of 'K' for the Control Period as 2.24%, considering the R&M expenses (Rs. 19.92 Cr.) and opening level of GFA (Rs. 887.76 Cr.) in FY07. DTL has projected its R&M expenses for the Control Period using the projected opening value of GFA for each year of the Control Period.

4.40 In addition to the R&M expenses determined above, the Petitioner has also considered other expenses towards annual O&M charges payable to PGCIL towards installation and maintenance cost for equipment at its Ballabhgarh and Mandola grid sub-stations, expenses towards diagnosis of 220 kV GIS bays at Kashmere Gate and Park Street, cost of spares required for revival of 220 kV GIS transformer bay at Kashmere Gate and spares required for 220 kV GIS bay at Kashmere Gate & Park Street.

4.41 The table below summarises the proposed R&M Expenses submitted by the Petitioner for the Control Period.

Table 43: Proposed R&M Expenses for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
GFA (Opening)	952.87	1148.01	1335.78	2915.39
K Value	2.24%	2.24%	2.24%	2.24%
Sub Total	**21.34**	**25.72**	**29.92**	**65.30**
Other R&M Charges	9.61	13.21	9.03	9.93
Total R&M Expenses	**30.96**	**38.94**	**38.95**	**75.23**

Commission's Analysis

4.42 The Commission believes that since 'K' is being used for determination of R&M expenses for four years (FY08 – FY11), it should be derived using data for a longer period to reduce the impact of any deviations in any particular year. Hence, the Commission has determined the value of 'K' for the Control Period as the average of the individual 'K' for the last 5 years (FY03 to FY07).

4.43 The Commission has considered the approved values of R&M Expenses and opening GFA, as contained in previous Tariff Orders to calculate the respective values of 'K' for the previous years, as shown below.

Table 44: Determination of 'K'

Particulars	FY03	FY04	FY05	FY06	FY07
Opening GFA (Rs Cr.)	650.00	670.94	739.50	743.90	827.87
R&M Expenses (Rs Cr.)	13.67	15.72	13.62	17.96	18.48
'K' (%)	**2.10**	**2.34**	**1.84**	**2.41**	**2.23**

4.44 The above analysis substantiates the justification for using a range of values for determination of 'K', due to the large fluctuations in individual 'K' values in the last five years (1.84% to 2.41%). The Commission has therefore determined the value of 'K' for the Control Period as 2.19%, which is the average 'K' for last 5 years.

4.45 The Commission has determined the R&M Expenses for each year of the Control Period, considering the opening level of GFA as approved by the Commission.

4.46 The Commission is of the view that the additional expenses claimed by the Petitioner for maintenance of its assets by PGCIL is also part of the maintenance of plant and machinery, which has been factored in the GFA. In addition, these expenses are corresponding to existing assets and no separate claim has been made by the Petitioner in the previous years. The approved values for the previous year have been used as base values to obtain the R&M expenses for the Control Period. Since, R&M expenses corresponding to these assets have been considered in the past, no additional provision of R&M Expenses is called for.

4.47 The summary of R&M Expenses approved by the Commission for the Control Period is as shown below.

Table 45: Approved R&M Expenses for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
GFA (Opening)	922.98	1112.98	1297.98	2497.98
K Factor	2.19%	2.19%	2.19%	2.19%
R&M Expenses	**20.18**	**24.34**	**28.38**	**54.63**

Efficiency Factor

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

4.49 The Commission expects the Petitioner to improve its performance considering the repetitive nature of O&M works and introduction of new technologies. Hence, the Commission has determined the efficiency improvement factor as 2%, 3% and 4% for FY09, FY10 and FY11 respectively.

4.50 The summary of total O&M Expenses approved by the Commission for the Control Period is provided in the table below.

Table 46: Approved O&M Expenses for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Employee Cost	56.19	76.59	67.04	69.83
R&M Expenses	20.18	24.34	28.38	54.63
A&G Expenses	14.89	15.51	16.15	16.82
Total O&M Expenses	**91.26**	**116.44**	**111.58**	**141.27**
Efficiency Improvement		2.0%	3.0%	4.0%
Net O&M Expenses	**91.26**	**114.11**	**108.23**	**135.62**

4.51 The Commission notes that the O&M expenses approved for the Control Period are on a higher side compared to industry benchmarks, due to the huge investments planned by the Petitioner for installing EHV underground cables, GIS sub-stations, etc. However, the Commission expects the Petitioner to make adequate efforts to control the O&M expenses.

4.52 In view of the huge investments planned by the Petitioner, the Commission shall true-up O&M expenses of DTL based on the actual investments and asset capitalisation for each year of the Control Period.

Capital Investment

Petitioner's Submission

4.53 The Petitioner submitted its Business Plan including details of proposed Capital Investment to be made during the Control Period. The Petitioner submitted that load forecast and investment requirements for the Control Period have been projected considering the growth in demand as per the results of the 17th Electric Power Survey conducted by the Central Electricity Authority, and the estimated generation capacity addition. The investment plan submitted by DTL also includes the corresponding capitalization schedule and financing plan.

4.54 The Petitioner made capital investments of Rs. 60.31 Cr. in the base year FY07, and has proposed capital investment during the Control Period as Rs. 192.32 Cr., Rs. 1309.82 Cr., Rs. 767.83 Cr. and Rs. 475.83 Cr. in FY08, FY09, FY10 and FY11 respectively. The summary of the investment plan proposed by DTL has been provided in the tables below.

Table 47: Summary of Proposed Resource Plan for the Control Period

Particulars	FY08	FY09	FY10	FY11
Demand (MW)	4529	4877	5253	5657
Demand (MU)	26662	28799	31107	33600
Capacity Addition (MVA)	1160	-	3420	880
Lines Addition (km)	15.91	72.4	140	15

Table 48: Proposed Capital Investment during the Control Period (Rs Cr.)

Scheme	FY08	FY09	FY10	FY11	Total
400kV Works	74.67	94.7	160.55	73.02	**402.94**
220kV Works	89.85	1145.38	540.93	345.56	**2121.72**
Miscellaneous O & M capital works of 400 kV & 220 kV s/s	6.12	27.83	30.40	33.82	**98.17**

Upgradation of Infrastructure & Construction of Corporate building	21.68	41.91	35.95	23.43	**122.97**
Total*	**192.32**	**1309.82**	**767.83**	**475.83**	**2745.8**

***** *Includes IDC and Establishment expenses*

4.55 The Petitioner has submitted that it shall meet its fund requirements mainly from the plan loan assistance provided by GoNCTD which will constitute 70% of the cost of the projects envisaged. It would meet the balance 30% out of internal accruals, additional borrowings or infusion of additional equity by GoNCTD.

Commission's Analysis

4.56 The Commission is of the view that DTL has projected an ambitious investment program of Rs. 2745 Cr. for the Control Period. Though the annual investments proposed for each year are significantly higher than the actual investments made by the Petitioner in previous years, the Commission believes that future capital investment needs to be considered on the basis of future requirements and not on past performance.

4.57 Several comments/ objections were received from stakeholders regarding the high capital investment proposed by DTL, including comments that the reduction in transmission losses is not commensurate with the level of investments. The Commission clarifies that a large part of the investment proposed by DTL is towards system expansion, upgradation and replacement, and evacuation of power from new generation sources, in addition to removing the transmission constraints in meeting the forecast demand and improving reliability and system stability. Hence, the proposed investments are not merely linked to reduction of transmission losses.

4.58 As part of the analysis, the Commission held several rounds of discussions with DTL and the Discoms to discuss the capital investment plan. The Commission has observed that there is lack of interaction between the Petitioner and the Discoms in preparation of the capital investment plan, which could lead to mismatch in the plans made by various entities of the power sector. It therefore directed the Discoms to analyze DTL's proposed capital investment and to discuss the same with DTL to synchronise their capital investment plan with DTL.

4.59 The Commission has considered the capital investment plan submitted by the Petitioner for the Control Period in light of the comprehensive System Planning Studies conducted by the Central Electricity Authority (CEA) in March 2006 to determine the transmission and sub-transmission system requirements in Delhi during the 11th Plan i.e. for the period upto FY12.

4.60 In this context, the Commission has noted that as per the CEA studies, the third 220 kV sub-station in Pappankalan area, i.e. Pappankalan-III is not considered necessary during the 11th plan period. Further, it has been ascertained that the commissioning schedule of the 1st generating unit at Jhajjar is expected by June/July 2010 and accordingly the works of 400/220/66 kV Mundka sub-station need to be phased appropriately, since the said Mundka Grid sub-station is planned as the in-feed point from Jhajjar Power project.

4.61 In their Business Plan, the Petitioner has submitted that the works envisaged were planned based on the provisions contained in the 11th Five Year Plan of DTL, prepared as per the recommendations of CEA. However, it submitted that the actual execution of works shall depend upon the availability of land for new projects to be provided by the respective development agencies, availability of right of way for the proposed new transmission lines and grant of other statutory clearances which shall be required from time to time. The slippage of targets on account of causes beyond the control of DTL cannot be ruled out completely. The Petitioner has stated that it shall endeavor to adhere to the time schedule and ensure the timely completion of works, and requested the Commission to shift the financial liabilities corresponding to any delays to the subsequent years.

4.62 The Capital Investment for the Control Period has been accordingly decided by the Commission keeping in view the above cited facts and the present pace of activities at the Petitioner's end. Therefore, the Commission has approved the following capital expenditure of the DTL for the Control Period.

Table 49: Approved Capital Investment during the Control Period (Rs Cr.)

Scheme	FY08	FY09	FY10	FY11	Total
Capital Investment*	152	880	640	400	**2,072**

** Excludes IDC and Establishment expenses*

4.63 The Commission is of the view that considering the requirements of the Delhi system, it is imperative that various schemes are initiated and completed on schedule. This would ensure that the benefits of investment are passed on to consumers at the earliest, and would also avoid any cost escalations as well as increase in IDC on account of delays.

4.64 The Commission expresses its concern for ensuring coordinated development of transmission and distribution system for facilitating evacuation of the new generation capacity tied up. This is essential to ensure that the entire load demand as anticipated from time to time, especially at the time of Commonwealth Games can be adequately met without any transmission and distribution constraints. In this endeavor, the Commission has constituted a Task Force headed by Director (Opr.), DTL in the 12th meeting of the Co-ordination Forum held on January 25, 2007. This Task Force has been mandated to look into the issues of coordinated development of the transmission and distribution system in Delhi for meeting the load demand adequately and maintain appropriate redundancy in the system. The Petitioner is advised to ensure that the Task Force operates effectively to have a coordinated and cohesive development of the transmission and distribution system.

4.65 The Commission wishes to state that the capital investment considered in this order is only for the purpose of tariff determination. It directs the Petitioner to seek approval of the Commission for the proposed schemes as per the terms and conditions of the License.

4.66 The Petitioner is advised to take up the proposed schemes for completion as per the time line/ schedule provided in the Business Plan and the funds/ basic infrastructure should be geared up accordingly. The Commission is of the opinion that there should not be any gaps in the transmission system which may impede the supply to end consumers.

Assets Capitalisation

Petitioner's Submission

4.67 The Petitioner has submitted the details of the capital works in progress for each year of the Control Period. The Petitioner has proposed to capitalize assets worth Rs. 190.42 Cr. in FY08, Rs. 184.74 Cr. in FY09, Rs. 1576.53 Cr. in FY10 and Rs. 483.30 Cr. in FY11, as shown in the table below.

Table 50: Proposed CWIP for the Control Period (Rs Cr.)

Scheme	FY08	FY09	FY10	FY11
Opening CWIP	146.09	147.97	1273.04	464.33
Additions to CWIP	192.30	1309.81	767.83	475.81
Capitalisation of Investment	190.42	184.74	1576.53	483.30
Closing CWIP	147.97	1273.04	464.33	456.84

Commission's Analysis

4.68 The Commission has analyzed the philosophy of asset capitalization followed by the Petitioner as reflected in their books of accounts / financial records. The Commission notes that the Petitioner usually executes a transmission scheme through various work orders issued for different elements of civil and electrical works. The Petitioner has capitalized assets on completion of respective work orders even though the entire scheme/ asset as a whole could be commissioned at a later date.

4.69 During technical validation sessions, the Petitioner also submitted that there have been delays in submission of completion reports by various divisions within DTL, and hence the capitalization reflected in the financial records is not reflective of the factual position. This certainly distorts the logical mechanism of capitalization for transmission assets.

4.70 The Commission is of the view that the transmission scheme comprising specified transmission lines, sub-stations with associated equipment and works as defined in the scope, need to be considered for capitalization only on commercial operation/ charging to rated voltage level after obtaining the statutory clearance of Electrical Inspector etc. and compliance with the safety rules/ regulations/ standards in vogue.

4.71 The Commission hereby directs the Petitioner to organize for scheme-wise completion and consequent capitalization of the assets in consonance with the commissioning/ commercial operation of the respective scheme which would be certified by the SLDC and considered as an element for calculation of transmission system availability.

4.72 The Petitioner is further directed that the relevant information be furnished in the formats prescribed by the Commission for capitalization of assets. The said 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. The capital expenditure incurred for deferred liabilities, residual works etc. within the original scope of scheme may be admitted by the Commission on merits and prudence checks. The Petitioner is advised to ensure timely completion of the works/ schemes as per the schedule stipulated in the proposals submitted to the Commission for approval.

4.73 For the purpose of determination of tariff, the Commission has analysed the various capital schemes/ new investments, schedule of completion of the various schemes and the likely commissioning schedule which can be envisaged at this stage. The Commission has accordingly considered provisional capitalization for the Control Period and the same would be subjected to true-up at the end of the Control Period. The Petitioner is directed to submit actual details of capitalization for each year for the Control Period by June 30 of the following year to the Commission for scrutiny and year-wise capitalization of assets.

4.74 Based on the above, the Commission has determined the following capitalisation schedule for the investments proposed during the Control Period.

Table 51: Approved CWIP for the Control Period (Rs Cr.)

Scheme	FY08	FY09	FY10	FY11
Opening CWIP	86.86	86.86	1001.86	601.86
Additions to CWIP	190.00	1100.00	800.00	500.00
Capitalisation of investment	190.00	185.00	1200.00	700.00
Closing CWIP	86.86	1001.86	601.86	401.86

Depreciation

Petitioner's Submission

4.75 The Petitioner has submitted detailed calculations of depreciation using asset-wise details of GFA, and the rates of depreciation as specified in the MYT Regulations. It has considered the opening value of GFA for the Control Period, based on closing value of GFA in the audited accounts for FY07, with suitable adjustments for assets belonging to the SLDC.

4.76 The Petitioner has considered the proposed additions and reductions in assets for obtaining the GFA for any year of the Control Period. The summary of GFA as proposed by the Petitioner for the Control Period is provided in the table below.

Table 52: Proposed Gross Fixed Assets (Rs Cr.)

Scheme	FY08	FY09	FY10	FY11
GFA (Opening)	952.87	1148.01	1335.78	2915.39
Addition	195.29	188.98	1581.13	487.73
Reduction	0.15	1.21	1.53	1.48
GFA (Closing)	1148.01	1335.78	2915.39	3401.64

4.77 The detail of the calculation of depreciation, as proposed by the Petitioner for the Control Period is provided in the table below.

Table 53: Proposed Depreciation for the Control Period (Rs Cr.)

Scheme	Rate	FY08	FY09	FY10	FY11
Land & Land Rights	0.00%	0.00	0.00	0.00	0.00
Buildings	3.60%	1.06	1.06	1.06	3.28
Other Civil Works	1.80%	1.29	1.30	1.57	2.15
Transformers (including foundations) having a rating of 100 kilo volt amperes and over	3.60%	22.56	26.17	39.88	56.18
Others	3.60%	0.08	0.64	1.63	2.72
Switchgears including line and cable network	3.60%	7.95	9.83	26.00	42.30
Meters	6.00%	0.01	0.01	0.01	0.01
Vehicles	18.00%	0.68	0.76	0.83	0.92
Computers	18.00%	0.57	1.06	1.48	1.87
Furniture and Fixtures	6.00%	0.19	0.20	0.22	0.25
Office Equipment & Others	6.00%	0.21	0.23	0.25	0.27
SCADA & PLCC	6.00%	3.08	3.13	3.19	3.26
Depreciation		**37.69**	**44.39**	**76.13**	**113.20**

Commission's Analysis

4.78 The Commission had earlier approved depreciation expenses in its previous tariff orders for each year by applying a weighted average rate of depreciation on the average GFA for the corresponding year. The Commission notes that the Petitioner has submitted the closing value of GFA for FY07 as Rs. 952.57 Cr., based on audited accounts, and this is different from the closing value of GFA approved by the Commission in the true-up for FY07 (Rs. 923.54 Cr.).

4.79 After analysis, the Commission found that the difference of Rs. 29.03 Cr. has arisen due to the difference in capitalisation of assets assumed by the Petitioner and that approved by the Commission in the previous years.

4.80 The Commission has allocated the closing balance of GFA for FY07 into different asset categories in the same ratio as that in the closing balance of GFA as per audited accounts of the Petitioner.

4.81 The Commission has considered the values corresponding to the following asset categories as the same as contained in the audited accounts of the Petitioner:

(a) Land & Land Rights;

(b) Meters;

(c) Vehicles; and

(d) SCADA & PLCC.

4.82 The Commission has allocated the balance value of assets, in the approved GFA, in the same proportion as provided in the audited accounts. The following table details the asset allocation for DTL to handle the mismatch between the values of fixed assets between the approved values and the audited accounts of the Petitioner.

Table 54: Asset Reallocation (Rs Cr.)

Particulars	FY07 (Actuals)	FY07 (True-Up)
GFA (Closing)	**953.59**	**923.54**
Asset Value Allocated		
Land & Land Rights	32.22	32.22
Meters	0.09	0.09
Vehicles	3.61	3.61
SCADA & PLCC	50.95	50.95
Balance GFA to be reallocated	**866.72**	**836.67**

Particulars	FY07 (Actuals)	FY07 (True-Up)
Buildings	29.57	28.54
Other Civil Works	71.57	69.09
Sub station equipments and other fixed apparatus	545.20	526.30
Switchgears including line and cable network	211.75	204.41
Computers	1.59	1.53
Furniture and fixtures	2.94	2.84
Office equipment & others	3.37	3.25
Small value assets	0.73	0.70

4.83 The closing balance of GFA of the Petitioner has then been allocated between its transmission business and the SLDC operation. Based on the above approach, the asset-wise opening GFA of the Petitioner's transmission business for FY08 considered by the Commission is shown in the table below.

Table 55: Opening Value of GFA for the Control Period (Rs Cr.)

Asset Category	FY07 (Closing) (True up) (Transmission + SLDC)	FY07 (Closing) (SLDC)	FY08 (Opening) (Approved) (Transmission
Land & Land Rights	32.22	0.00	32.22
Buildings	28.54	0.00	28.54
Other Civil Works	69.09	0.00	69.09
Sub station Equipments and other fixed apparatus	526.30	0.00	526.30
Switchgears including line and cable network	204.41	0.00	204.41
Meters	0.09	0.00	0.09
Vehicles	3.61	0.05	3.56
Computers	1.53	0.04	1.49
Furniture and Fixtures	2.84	0.18	2.66
Office Equipment & Others	3.25	0.06	3.19
SCADA & PLCC	50.95	0.21	50.74
Small Value Assets	0.70	0.01	0.69
Total	**923.54**	**0.55**	**922.98**

4.84 After determining the opening balance of GFA for the Control Period, the Commission has considered asset additions in each year based on approved asset capitalisation. The issue of retirement of assets and its impact on ARR shall be considered separately by the Commission. The summary of opening and closing GFA for the Control Period is given in the table below.

Table 56: GFA Approved by the Commission (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Opening Balance of GFA	922.98	1112.98	1297.98	2497.98
Asset Additions	190.00	185.00	1200.00	700.00
Reduction	0.00	0.00	0.00	0.00
Closing Balance of GFA	**1112.98**	**1297.98**	**2497.98**	**3197.98**

4.85 The Commission has considered asset addition of Rs 2275 Cr. during the Control Period, against the proposed addition of Rs 2453.14 Cr. For purpose of simplicity, the Commission has considered all the differences between proposed and approved values of asset addition to be in the sub-station equipment and other fixed apparatus category.

4.86 Based on the asset values during the Control Period and the rates of depreciation, specified in the MYT Regulations, the Commission has approved the depreciation for the Control Period mentioned in the table below.

Table 57: Approved Depreciation for the Control Period (Rs Cr,)

Asset Category	Rate	FY08	FY09	FY10	FY11
Buildings	3.60%	1.03	1.03	1.03	3.24
Other Civil Works	1.80%	1.25	1.26	1.53	2.11
Sub station Equipments and other fixed apparatus	3.60%	21.85	25.99	33.05	46.33
Others	3.60%	0.08	0.64	1.63	2.72
Switchgears including line and cable network	3.60%	7.69	9.57	25.74	42.04
Meters	6.00%	0.01	0.01	0.01	0.01
Vehicles	18.00%	0.68	0.75	0.83	0.91
Computers	18.00%	0.55	1.04	1.46	1.85
Furniture and Fixtures	6.00%	0.17	0.19	0.21	0.23
Office Equipment & Others	6.00%	0.20	0.22	0.24	0.26
SCADA & PLCC	6.00%	3.07	3.12	3.18	3.24
Total Depreciation		**36.57**	**43.80**	**68.89**	**102.94**

Accumulated Depreciation

Petitioner's Submission

4.87 The Petitioner has submitted the schedule of accumulated depreciation for the Control Period, as shown in the table below.

Table 58: Accumulated Depreciation as submitted by DTL (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Opening Balance	138.07	175.76	220.15	296.28
Depreciation for the year	37.69	44.39	76.13	113.20
Closing Balance	**175.76**	**220.15**	**296.28**	**409.48**

Commission's Analysis

4.88 The Commission analyzed the submissions of the Petitioner and noted the difference in opening balance of accumulated depreciation submitted by the Petitioner for the first year of the Control Period and the closing value of accumulated depreciation submitted for FY07. The Commission directed the Petitioner to clarify the discrepancy in the data submitted in the petition.

4.89 The Petitioner subsequently clarified that it had not considered depreciation of Rs. 200 Cr, contained in the opening balance sheet of DTL according to the Transfer Scheme, while calculating the accumulated depreciation for the Control Period.

4.90 For calculating the accumulated depreciation for the Control Period, the Commission has considered the accumulated depreciation at the end of FY07, which includes the depreciation of Rs. 200 Cr, contained in the opening balance sheet of DTL according to the Transfer Scheme.

4.91 The accumulated depreciation based on depreciation values approved by the Commission for the Control Period is as shown below.

Table 59: Approved Accumulated Depreciation (Rs Cr.)

Scheme	FY08	FY09	FY10	FY11
Opening Balance	299.25	335.82	379.62	448.51
Depreciation for the Year	36.57	43.80	68.89	102.94
Accumulated Depreciation	**335.82**	**379.62**	**448.51**	**551.45**

Advance Against Depreciation

Petitioner's Submission

4.92 The Petitioner has requested the Commission to provide for advance against depreciation (AAD) during the Control Period, by considering the actual debt repayment and the depreciation recovered during the year.

4.93 The Petitioner has proposed AAD, as detailed in the table below.

Table 60: AAD submitted by DTL (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
1/10th of the Loan(s)	105.13	114.59	169.66	232.46
Repayment of the Loan(s) as considered for working out Interest on Loan	55.98	64.70	116.30	140.91
Minimum of the Above	55.98	64.70	116.30	140.91
Less: Depreciation during the year	37.69	44.39	76.13	113.20
A	**18.29**	**20.31**	**40.17**	**27.71**
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	104.49	167.11	282.84	420.59
Less: Cumulative Depreciation	175.76	220.15	296.28	409.48
B	**-71.27**	**-53.04**	**-13.44**	**11.11**
AAD = min (A, B)/ zero if negative	**0.00**	**0.00**	**0.00**	**11.11**

Commission's Analysis

4.94 The Commission has calculated the advance against depreciation for each year of the Control Period, using the principles specified in the MYT Regulations and considering the details of actual cumulative debt repayment and accumulated depreciation claimed by the Petitioner.

4.95 The Commission has concluded that no requirement for AAD would occur during the Control Period, as shown below.

Table 61: AAD approved by Commission (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
1/10th of the Loan(s)	40.32	76.44	129.64	166.04
Repayment of the Loan(s) as considered for working out Interest on Loan	53.33	59.98	98.48	126.48

Minimum of the Above	40.32	59.98	98.48	126.48
Less: Depreciation during the year	36.57	43.80	68.89	102.94
A	**3.75**	**16.19**	**29.59**	**23.54**
Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan	125.85	185.84	284.32	410.80
Less: Cumulative Depreciation	335.82	379.62	448.51	551.45
B	**(209.97)**	**(193.78)**	**(164.19)**	**(140.65)**
AAD = min (A, B)/ zero if negative	**0.00**	**0.00**	**0.00**	**0.00**

Return on Capital Employed

4.96 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.

Regulated Rate Base

Petitioner's Submission

4.97 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, as shown in the table below.

Table 62: Proposed RRB for the Control Period (Rs Cr.)

Particulars	FY06	FY07	FY08	FY09	FY10	FY11
OCFA	887.76					
Accumulated Depreciation	105.36					
Δ AB	71.15	34.90	157.60	144.59	1505.01	374.53
Investments capitalized	101.23	67.61	195.29	188.98	1581.13	487.73
Depreciation	30.07	32.71	37.69	44.39	76.13	113.20
Change in WC	36.28	46.89	26.97	4.73	0.26	64.20
RRB	**782.40**	**846.73**	**969.96**	**1125.79**	**1950.85**	**2954.81**

Commission's Analysis

4.98 The Commission observed that the formula used by the Petitioner for the calculation of RRB is different from the formula specified in the MYT Regulations. In addition, the Petitioner has considered FY06 as the base year for calculation of RRB.

4.99 The Petitioner's actual debt-equity ratio at the end of FY07 is 77:23. The Petitioner submitted the debt-equity ratio during the Control Period as 70:30, which was possible only if the capital investment during the Control Period was proposed to be funded by a higher equity component than 30%.

4.100 The Commission discussed the same with the Petitioner during technical validation sessions, and has determined the RRB, using the formula specified in the MYT Regulations. It has therefore, approved the rate base for each year of the Control Period, as shown below.

Table 63: Approved RRB for the Control Period (Rs Cr.)

	Particulars	FY07	FY08	FY09	FY10	FY11
A	OCFA	923.54				
B	Accumulated Depreciation	299.25				
C	RRB (opening)	624.28	690.18	843.33	983.11	2116.56
D = E-F	Δ AB	65.89	153.43	141.20	1131.11	597.06
E	Investments capitalized	95.67	190.00	185.00	1200.00	700.00
F	Depreciation	29.77	36.57	43.80	68.89	102.94
G	Change in WC		(0.27)	(1.43)	2.35	38.68
H = C+D+G	RRB (Closing)	690.18	843.33	983.11	2116.56	2752.30
I = C+D/2+G	**RRB(i)**		**766.62**	**912.51**	**1551.01**	**2453.77**

Working Capital Requirement

Petitioner's Submission

4.101 The Petitioner has submitted the details of working capital requirement for each year of the Control Period and has considered the following components for calculating its working capital requirements:

(a) Receivables for two months towards transmission tariffs; and

(b) Operation and Maintenance expenses for two month.

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

Table 64: Proposed Working Capital for the Control Period (Rs Cr.)

Particulars	FY07	FY08	FY09	FY10	FY11
O&M Expenses	85.90	133.17	139.55	73.12	188.29
R&M Expenses	19.92	30.96	38.94	38.95	75.23

A&G Expenses	13.40	15.91	16.54	17.20	17.89
Employee Expenses	52.58	86.31	84.08	16.96	95.16
1/6th of Total	7.16	22.20	23.26	12.19	31.38
Receivables					
Annual revenues from Tariffs and Charges	238.38	310.00	332.00	400.00	670.00
Receivables equivalent to 2 months average billing	39.73	51.67	55.33	66.67	111.67
Total Working Capital	**46.89**	**73.86**	**78.59**	**78.85**	**143.05**

Commission's Analysis

4.103 The Commission has observed that the Petitioner has considered O&M Expenses for two months, instead of O&M Expenses for one month as specified in the MYT Regulations for Transmission.

4.104 Based on the approved O&M Expenses and expected revenues from Transmission Charges, the Commission approves the working capital requirement for the Control Period provided in the table below.

Table 65: Approved Working Capital for the Control Period (Rs Cr.)

Particulars	FY07	FY08	FY09	FY10	FY11
A. O&M Expenses	94.10	91.26	114.11	108.23	135.62
1/12th of Total O&M Expenses	7.84	7.61	9.51	9.02	11.30
B. Receivables					
Annual revenues from Tariffs and Charges	183.07	182.84	162.85	179.87	398.24
Receivables equivalent to 2 months average billing	30.51	30.47	27.14	29.98	66.37
Total Working Capital	**38.35**	**38.08**	**36.65**	**39.00**	**77.68**

Means of Finance

Petitioner's Submission

4.105 The Petitioner has projected drawl of new loans to fund capital investment during the Control Period. It has submitted that 70% of investment would be made through debt taken from the Plan funds of GoNCTD. These loans would have tenure of 15 years and an interest rate of 11.5%.

Table 66: Proposed Debt Requirement for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Base Capital Investment	151.72	1213.84	503.42	378.89
Debt Requirement	106.20	849.69	352.39	265.23

4.106 The summary of outstanding loans at the end of each year of the Control Period as submitted by the Petitioner is provided in the table below.

Table 67: Outstanding Loans at the end of each year of the Control Period (Rs Cr.)

Particulars	FY07	FY08	FY09	FY10	FY11
DPCL Loan	255.00	225.00	195.00	165.00	135.00
Loan from GoNCTD	341.25	421.47	849.69	1505.20	1662.67
Total	**596.25**	**646.47**	**1044.69**	**1670.20**	**1797.67**

Commission's Analysis

4.107 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.

4.108 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.

4.109 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. The summary of debt requirement for the Control Period based on the investment plan approved by the Commission is provided in the table below.

Table 68: Approved Debt Requirement for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Base Capital Investment	152.00	880.00	640.00	400.00
Debt Requirement	106.40	616.00	448.00	280.00

4.110 The Commission during the process had interacted with the GoNCTD, requesting to provide information about the planned commitment from GoNTDC towards the funding of the capital investment planned by DTL during the Control Period. The GoNCTD has duly replied, to the Commission's query vide letter No. F.11 (04)/2006/Power/2588 dated October 16, 2007, the following:

"As regards the specific Capex funding of DTL and IPGCL referred by DERC, it is informed that the total approved plan outlay by GNTCD in XI Five Year Plan for DTL is Rs. 1225 Cr and Rs. 3200 Cr for IPGCL & PPCL together including Rs.30 Cr for Rajghat Power House. It is informed that based on the future requirement of the Companies and review by GoNCTD, the Government will fund 100% of the capex programmes through loan and equity."

4.111 The above reply from the Government indicates that GoNCTD would support debt and equity requirements based on the future capital investment plan of DTL. Thus, the new loans to be taken by DTL for proposed capital investment during the Control Period are thereby assumed to be funded by GoNCTD. The Commission has considered an interest rate of 11.50% for the new loans to be taken up by DTL during the Control Period. The summary of outstanding loans at the end of each year approved by the Commission is provided below.

Table 69: Approved Loan Details (Outstanding) (Rs Cr.)

Particulars	FY07	FY08	FY09	FY10	FY11
DPCL Loan					
Opening Balance	270.00	255.00	225.00	195.00	165.00
Addition	0.00	0.00	0.00	0.00	0.00
Repayment	15.00	30.00	30.00	30.00	30.00
Closing Balance	255.00	225.00	195.00	165.00	135.00
GoNCTD Loans					
Opening Balance	265.13	277.48	360.54	946.56	1326.08
Addition	31.68	106.40	616.00	448.00	280.00
Repayment	19.33	23.33	29.98	68.48	96.48
Closing Balance	277.48	360.54	946.56	1326.08	1509.59
Total	**532.48**	**585.54**	**1141.56**	**1491.08**	**1644.59**

4.112 The Commission directs the Petitioner to take up the issue of interest rate with GoNCTD for appropriate reduction. It may also borrow from other lenders at a lesser rate of interest.

Determination of WACC and RoCE

Petitioner's Submission

4.113 The Petitioner submitted details of return to be allowed during the Control Period. It has considered normative debt and equity requirement for each year of the Control Period to arrive at the total outstanding debt and equity in each year. The opening value of debt and equity for the Control Period is the same as the closing value of debt and equity in FY07.

4.114 The Petitioner has 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.

4.115 The Petitioner has calculated the return on capital employed considering the regulated rate base and the WACC for the respective years. The summary of the RoCE calculations, submitted by the Petitioner is provided in the table below.

Table 70: Proposed RoCE for the Control Period (Rs Cr.)

	Particulars	FY07	FY08	FY09	FY10	FY11
A	RRB_i	846.73	969.96	1125.79	1950.85	2954.81
B	Δ AB	34.90	157.60	144.59	1,505.01	374.53
$C = (A_{i-1} + (B_i + B_{i-1})/2)* 30\%$	Equity (closing)	180.00	282.90	336.32	585.18	867.18
$D = (A_{i-1} + (B_i + B_{i-1})/2)* 70\%$	Debt (Closing)	596.25	660.09	784.74	1365.41	2023.43
E	Rate of Return on Equity		14%	14%	14%	14%
F	Rate of Return on Debt		11.5%	11.5%	11.5%	11.5%
G = E*(C/(C+D))+ F*(D/(C+D))	WACC		12.25%	12.25%	12.25%	12.25%
H = A * G	**RoCE**		**118.82**	**137.91**	**238.98**	**361.96**

Commission's Analysis

4.116 The Commission observed that the Petitioner has applied the normative debt-equity ratio of 70:30 on the opening balance of the regulated rate base and the average value of all investments during the Control Period to obtain the closing balance of debt and equity in any year of the Control Period.

4.117 Since this was not in line with the approach specified in the MYT Regulations, which specified the normative debt-equity ratio only for new investments, the Commission directed the Petitioner to submit suitable clarifications on the same. The Petitioner subsequently clarified that it had considered debt-equity ratio as 70:30 on both old and new investments. The Commission has however, considered the debt-equity ratio of old assets as per actuals, and for new assets considered the normative ratio specified in the MYT regulations.

4.118 The Commission has thereby calculated the RoCE for the Control Period based on the WACC derived and the regulated rate base approved for the Control Period, as explained above. The table below summarises the RoCE approved by the Commission for the Control Period.

Table 71: Approved RoCE for the Control Period (Rs Cr.)

	Particulars	FY07	FY08	FY09	FY10	FY11
A	RRB_i		766.62	912.51	1551.01	2453.77
B	Δ AB		153.43	141.20	1131.11	597.06
$C_n = C_{n-1} + (B_n *30\%)$	Equity	180.00	226.03	268.39	607.72	786.84
$D_n = D_{n-1} + (B_n *70\%)$	Debt	532.48	639.88	738.72	1530.50	1948.44
E	Rate of Return on Equity		14.00%	14.00%	14.00%	14.00%
F	Rate of Return on Debt		11.50%	11.50%	11.50%	11.50%
G = E*(C/(C+D))+ F*(D/(C+D))	WACC		12.15%	12.17%	12.21%	12.22%
H = A * G	**RoCE**		**93.16**	**111.02**	**189.39**	**299.83**

Capitalisation of Expenses & Interest Charges

Petitioner's Submission

4.119 The capitalisation of interest and other expenses as submitted by the Petitioner is given in the table below.

Table 72: Proposed Capitalisation of Interest and Other Expenses (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Interest & Finance Charges Capitalised	26.09	86.68	175.21	75.07
Employee Expenses	4.61	11.60	91.57	23.83
A&G Expenses	0.00	0.00	0.00	0.00
Total	**30.70**	**98.28**	**266.78**	**98.90**

Commission's Analysis

4.120 The Commission has calculated the capitalisation of Interest & Financing Charges by considering the capitalisation of Interest & Financing Charges submitted by the Petitioner and proportionately allocating the same based on the capital expenditure submitted by the Petitioner and approved by the Commission for the Control Period.

4.121 For capitalizing the Employee and A&G Expenses for the Control Period 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.

4.122 The summary of the Employee Expenses and Interest Charges capitalised by the Commission is provided in the table given below.

Table 73: Approved Expense Capitalisation (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Interest & Finance Charges Capitalised	26.03	86.80	133.36	108.73
Employee expenses	2.84	9.30	43.06	20.25
A&G Expenses	0.00	0.00	0.00	0.00
Total	**28.87**	**96.10**	**176.42**	**128.98**

Tax Expenses

Petitioner's Submission

4.123 The Petitioner has submitted the details about taxes on income and provision kept for FBT for the Control Period. It has however, not considered the same as part of the ARR. The summary of taxes submitted by DTL is given in the table below.

Table 74: Proposed Tax Expenses for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Provision for FBT	0.52	0.57	0.62	0.69
Income Tax	26.75	34.78	79.22	79.85
Total	**27.26**	**35.34**	**79.85**	**80.54**

Commission's Analysis

4.124 The Commission has not considered any expenses on account of Income Tax or Fringe Benefit Tax, payable by the Petitioner during the Control Period, for calculation of fixed cost. Income Tax, if any, shall be treated as expense and shall be recoverable from the Beneficiaries.

4.125 Recovery of income tax shall be done directly by the Petitioner from the beneficiaries without making any application before the Commission. Any refund of income tax shall be adjusted with the tax payable in the year of its receipt, and not against the year for which it is applicable.

4.126 In case of any objections by the beneficiaries to the amounts claimed on account of income tax, they shall first make payments to the Petitioner and may subsequently make an application before the Commission regarding the same.

Rebate on Transmission/ Wheeling of Power

Petitioner's Submission

4.127 The Petitioner has estimated the rebate given to Discoms on wheeling of power as Rs. 5.28 Cr. for each year of the Control Period.

Commission's Analysis

4.128 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.

Total Expenditure

Petitioner's Submission

4.129 The table given below provides a summary of the various expenses as proposed by the Petitioner for the Control Period.

Table 75: Proposed Expenditure of DTL (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Operation & Maintenance Costs	137.78	151.15	164.69	212.12
Depreciation	37.69	44.39	76.13	113.20
Advance Against Depreciation	0.00	0.00	0.00	11.11
Rebate on Transmission/ Wheeling of Power	5.28	5.28	5.28	5.28
Total Expenditure	**180.75**	**200.83**	**246.09**	**341.71**

Commission's Analysis

4.130 The table given below provides a summary view of the various expenses as approved by the Commission for the Control Period. Detailed analysis of each expense has already been provided in the above sections.

Table 76: Approved Expenditure of DTL (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Operation & Maintenance Expenses	91.26	114.11	108.23	135.62
Depreciation	36.57	43.80	68.89	102.94

Advance Against Depreciation	0.00	0.00	0.00	0.00
Rebate on Transmission/ Wheeling of Power	0.00	0.00	0.00	0.00
Total Expenditure	**127.83**	**157.90**	**177.12**	**238.56**

Non Tariff Income

Petitioner's Submission

4.131 The Petitioner has submitted the details of Non Tariff Income (NTI) for the Control Period. The Non-Tariff Income of DTL has been estimated at Rs. 9.42 Cr., Rs. 11.18 Cr., Rs. 11.76 Cr. and Rs. 12.65 Cr. in FY08, FY09, FY10 and FY11 respectively by the Petitioner, as depicted in table below.

Table 77: Proposed Non-Tariff Income for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Interest on Staff Loans & Advances	0.03	0.03	0.03	0.04
Income from Investments	1.33	1.23	0.61	0.59
Interest on Fixed deposits	4.32	4.75	5.23	5.75
Income from sale of scrap	0.15	1.21	1.53	1.48
Miscellaneous Receipts	3.60	3.96	4.35	4.79
Total	**9.42**	**11.18**	**11.76**	**12.65**

4.132 The Petitioner has considered the following while calculating the non-tariff income (NTI) for the Control Period.

(a) Interest on Loans & Advances has been escalated at 10%

(b) Interest income from investments as per annual scheduled income from bonds

(c) Interest from Fixed deposits has been escalated at 10%

(d) Interest from Miscellaneous receipts has been escalated at 10%

Commission's Analysis

4.133 The Commission has analysed the submission made by the Petitioner in detail and approves the NTI for the Control Period as provided in the table below.

Table 78: Approved Non-Tariff Income for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Interest on Staff Loans & Advances	0.03	0.03	0.03	0.04
Income from Investments	1.33	1.23	0.61	0.59
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
Total	**9.28**	**9.97**	**10.22**	**11.17**

Aggregate Revenue Requirement

Petitioner's Submission

4.134 The table given below provides a summary view of the Aggregate Revenue Requirement (ARR) as proposed by the Petitioner for the Control Period.

Table 79: Proposed ARR for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Total Expenditure	**180.75**	**200.83**	**246.09**	**341.71**
Interest expenses Capitalised	26.09	86.68	175.21	75.07
RoCE	118.82	137.91	238.98	361.96
Less: Interest & Other Expenses Capitalised	30.70	98.28	266.78	98.90
Income Tax Provision	0.00	0.00	0.00	0.00
Expenditure on DSIDC Bawana-I	7.94	0.00	0.00	0.00
Revenue Requirement	**302.90**	**327.13**	**393.50**	**679.84**

Commission's Analysis

4.135 The Commission observes that the expenditure on account of DSIDC Bawana I cannot be considered as part of the revenue requirement of the transmission business of the Petitioner. Since the project is a part of deposit works, it would be considered separately by the Commission. Hence, expenses on account of the same have not included the same in determination of ARR for the Control Period.

4.136 The table given below provides a summary view of the Revenue Requirement as approved by the Commission for the Control Period. Detailed analysis of each expense head has already been provided in the above sections.

Table 80: Approved ARR for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
Total Expenditure	127.83	157.90	177.12	238.56
Return on Capital Employed	93.16	111.02	189.39	299.83
Less: Interest & Other Expenses Capitalised	28.87	96.10	176.42	128.98
Less: Non Tariff Income	9.28	9.97	10.22	11.17
Income Tax Provision	0.00	0.00	0.00	0.00
Revenue Requirement	**182.84**	**162.85**	**179.87**	**398.24**

Expenses for SLDC functions

4.137 The Commission in its interim order dated May 9, 2007 had allowed the Petitioner to raise bills for Annual Transmission Charge and SLDC charges for FY08 considering the provisional ARR of Rs. 190.44 Cr. The Commission has determined SLDC charges for FY08, based on the submissions of certain components by the Petitioner as part of its MYT petition.

Table 81: Approved ARR of SLDC for FY08 (Rs Cr.)

Particulars	FY07 Actuals	FY08
Employee Expenses	4.76	4.95
R&M expenses	1.44	1.51
A&G expenses	1.00	1.04
Depreciation	0.03	0.04
Revenue Requirement (SLDC)	**7.23**	**7.55**

4.138 Hence, the revenue requirement for the SLDC function for FY08 has been obtained as Rs 7.55 Cr. Since, the SLDC Regulations have now been notified, the Commission directs the Petitioner to file a separate petition for determination of SLDC charges for the subsequent years, including details of actual expenses for FY08. The Commission also clarifies that this petition would entail no petition fee.

Total ARR for the Petitioner for the Control Period

4.139 The Commission has determined the Aggregate Revenue Requirement for the Petitioner for the Control Period as shown below. This includes the revenue requirement of the SLDC for FY08, as discussed above.

Table 82: Approved ARR for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
ARR for Transmission Business	182.84	162.85	179.87	398.24
ARR for SLDC function	7.55			
Total ARR	**190.39**	**162.85**	**179.87**	**398.24**

True-Up of Provisional Tariff Allowed for FY08

4.140 The Commission in its interim order dated May 9, 2007 had allowed provisional wheeling charges of Rs. 190.44 Cr for FY08 to be recovered by DTL for the power supplied to the Distribution Licensees including deemed licensees in the National Capital Territory of Delhi. The Commission in the interim order had mentioned that the Provisional Charges so recovered shall be subject to adjustment and true-up at the time of Order for FY08.

4.141 The Petitioner has already raised the bills for recovering the monthly transmission charges of Rs. 15.87 Cr. from the Discoms, for the months of April to November 2007, on the basis of the provisional annual charges allowed. The Commission has now approved the annual transmission charges for FY08 as Rs. 190.39 Cr. (including charges for SLDC operation) resulting into applicable monthly transmission charges of Rs. 15.87 Cr.

A5: TRANSMISSION TARIFF DESIGN

5.1 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 each year of the Control Period.

5.2 This chapter details out the methodology adopted by the Commission for designing and approving the Transmission Service Charge for the Control Period.

5.3 Since the Petitioner has not submitted any tariff proposal for the Control Period, the Commission has determined tariffs following the approach contained in the MYT Regulations.

Transmission Tariff Design and Allocation

5.4 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.

5.5 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.*"

5.6 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 83: Approved ARR for the Control Period (Rs Cr.)

Particulars	FY08	FY09	FY10	FY11
ARR for Transmission Business	182.84	162.85	179.87	398.24
ARR for SLDC function	7.55			
Total ARR	**190.39**	**162.85**	**179.87**	**398.24**

5.7 The above charges shall be recovered every month on pro-rata basis and shall be shared by all the Distribution Licensees, including deemed licensees and other beneficiaries in proportion to the generating capacity allocated from the various Central Sector Generating Stations, generating stations within Delhi and contracted power on bilateral basis.

5.8 The charges from short term open access customers, if any, shall be recovered in line with the provisions mentioned in the MYT regulations.

5.9 The transmission service charge shall be recovered fully, only if it the transmission system availability is above 98%, as specified in the MYT regulations. The charges shall be recovered on a pro rata basis in case the availability is lower than the target level.

5.10 The transmission tariff, thus, payable by the users of the Transmission system shall be determined in accordance with the following formula:

$$TR_i = (\text{Net ARR} / 12)^* (TC_i / TCC)$$

Where,

TR_i: Transmission charges for i^{th} long term user, in Rs. /month

Net ARR: Net Aggregate Revenue Requirement, as approved by the Commission

TC_i: Total Capacity/ Entitlement in MW of the i^{th} user of the Transmission system for the respective month

TCC: Total Capacity/ Entitlement in MW of the Transmission system by all Long-Term Users for the respective month

Sample Bill for Monthly Transmission Charges

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

Table 84: Sample Bill for calculating the monthly Transmission Charges

Billing of Transmission Charge for the month of XXX										
Aggregate Revenue Requirement (Rs. Cr)				120						
Monthly Charges Applicable (Rs. Cr)				12						
Past Adjustments (Rs. Cr)				(2)						
Net Monthly Charges (Rs. Cr)				10						
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	%	Rs. Cr
BRPL	100	29%	200	40%	70	47%	370	37%	3.7
BYPL	100	29%	150	30%	50	33%	300	30%	3
NDPL	75	21%	150	30%	30	20%	255	26%	2.6
NDMC	50	14%	0	0%	0	0%	50	5%	0.5
MES	25	7%	0	0%	0	0%	25	3%	0.3
Total	**350**	**100%**	**500**	**100%**	**150**	**100%**	**1000**	**100%**	**10**

A6: DIRECTIVES

6.1 The Commission has issued certain directives in this Tariff Order, some of which have been detailed in the previous chapters and have been listed below for easy reference:

Capital Investment/ Capitalisation of Assets

6.2 The Commission directs the Petitioner to take up all possible measures to ensure that the projects/ schemes are completed on schedule.

6.3 The Commission directs the Petitioner to seek approval of the Commission for all schemes as per the terms and conditions of the License.

6.4 The Petitioner is required 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. The Petitioner is directed to submit the actual details of capitalization for each year of the Control Period by June 30 of the following year for consideration of the Commission. All information regarding capitalization 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.

6.5 The Commission further directs that, in future, the funds to be drawn from the GoNCTD Plan funds to be limited to the capital investments for the respective year.

6.6 The Commission hereby directs TRANSCO to organize for scheme-wise completion and consequent capitalization 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 TRANSCO.

SLDC Charges

6.7 The Commission directs the Petitioner to file a separate petition for determination of SLDC charges for the subsequent years, including details of actual expenses for FY08. The Commission also clarifies that this petition would entail no petition fee.

Reactive Energy

6.8 The Commission directs the Petitioner to maintain a separate account for the reactive energy wheeled and the respective reactive charges levied to the Discoms. Since no proposal for reactive energy charges was included by the Petitioner in this petition, the existing arrangement for levy of reactive energy charges shall continue. The Petitioner is directed to file an appropriate petition for reactive energy charges within three months of issue of this order.

Income Tax Refunds

6.9 The Commission directs the Petitioner to take up the issue of income tax refunds received by generating companies or transmission companies, who have either supplied or wheeled power to the Petitioner till FY07, for ascertaining its share in the refunds so received.

Incentives Received from CPSU's

6.10 The Commission directs the Petitioner to submit details of actual receipt of the incentive amount received from CPSU's under the one-time settlement scheme as well as the time and manner it was put to use. Any interest earned on the incentive amount shall be adjusted during true-up, and therefore, the Petitioner is expected to take up the matter with the concerned agencies which enjoyed the benefit.

Interest rate on Loans from GoNCTD

6.11 The Commission directs the Petitioner 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.

R&M Expenses

6.12 The Commission directs the Petitioner to submit details of actual R&M works carried out at the end of each quarter, within 30 days of the end of the quarter, as in the past.